	Ala	Trp	ŗĀ2	Mec 500	Leu	Gly	Fen	Phe	Arg 505	Lys	His	Asn	Lys	Ila 510	Pro	Arg
5	Ser		Leu 515	Leu	Asn	Glu	Leu	Mec 520	Asp	Ser	Ala	ГÀг	Val 525	Ser	Asn	Ser
	520	Ser 530	Gln	Ala	Ile	Glu	Val 535	Val	Glu	Leu	Ala	Ser 540	Ala	Phe	Ser	Leu
10	Pro 545	Ile	Cys	Glu	Gly	Lau 550	Thr	Gln	Arg	Val	Met 555	Ser	Asp	Phe	Ala	Ilæ 560
15	Asn	Gln	Glu	Gln	Lys 563	Glu	Ala	Leu	Ser	Asn 570	Leu	Thr	Ala	Lau	Thr 575	Ser
	Asp	Ser	Asp	Thr 580	qzA	Ser	Ser	Ser	Asp 585	Ser	Asp	Ser	Asp	Thr 590	Ser	Glu
20	Gly	Lys								-						
	(2)	INFO	DEMAG	CION	FOR	SEO	ID 1	NO: 2	252 :							
25			(i) :	SEQUI	ENCE		RACT	ERIS	riçs		ds					
						YPE:										
30		•	(xi)					lin PTIO		EQ II	D NO	: 25	3:			
30 ·	Mec 1			SEQ	JENC:	E DE:	SCRI	PTIO	N: Si					920	Leu 15	Leu
30 · 35	1	Lys	Leu	SEQI Asn	JENC: Leu 5	E DE: Cys	SCRI Ile	PTIO	N: Si Asn	Trp 10	Ala	Arg	Ċys	Pro Asp 30	15	
	1 Leu	Lys Leu	Leu	SEQUASIN Pro	JENC Leu 5 Gln	E DE: Cys Leu	Ile Leu	PTION PTO	Asn Phe 25	Trp 10 Gln	Ala Gly	Arg Glu	Cys	Asp	15 Asp	Pro
35	l Leu Leu	Lys Leu Lys	Leu Phe- Ala 35	SEQUASIN Pro 20	Leu 5 Gln Ala	E DE: Cys Leu Ala	Ile Leu Asn	PTION Pro Pro Leu 40	Asn Phe 25 Val	Trp 10 Gln Glu	Ala Gly Ala	Arg Glu · Val	Cys Asp Pro 45	Asp 30	15 Asp Gly	Pro
35	l Leu Leu Lys	Lys Leu Lys Ala 50	Phe-Ala 35	SEQUASIN Pro 20 Lys	Leu 5 Gln Ala Phe	E DE Cys Leu Ala Gln	Ile Leu Asn Val	PTION PTO PTO Leu 40 Thr	Asn Phe 25 Val	Tro 10 Gln Glu Leu	Ala Gly Ala Val	Arg Glu Val Arg 60	Cys Asp Pro 45 Val	Asp 30 Trp	15 Asp Gly Leu	Pro Ile Gln
35	Leu Leu Lys Ser 65	Lys Leu Lys Ala 50 Cys	Phe Ala 35	SEQUASN Pro 20 Lys Ser Pro	Leu 5 Gln Ala Phe Ser	Cys Leu Ala Gln Arg 70	Ile Leu Asn Val 55 Pro	PTO Pro Leu 40 Thr	Asn Phe 25 Val Cys	Trp 10 Gln Glu Leu Leu	Ala Gly Ala Val Leu 75	Arg Glu Val Arg 60	Cys Asp Pro 45 Val Thr	Asp 30 Trp Gln	1S Asp Gly Leu Gln	Pro Ile Gln Ser 80
35	Leu Leu Lys Ser 63	Lys Leu Lys Ala 50 Cys	Leu Phe- Ala 35 Pro Thr .	SEQUASN Pro 20 Lys Ser Pro	JENC: Leu 5 Gln Ala Phe Ser 85	E DE Cys Leu Ala Gln Arg 70 Cys	Ile Leu Asn Val 55 Pro	Proof Leu 40 Thr	N: Si Asn Phe 25 Val Cys Thr	Trp 10 Gln Glu Leu Leu 90	Ala Gly Ala Val Leu 75	Arg Glu Val Arg 60 Ala	Cys Asp Pro 45 Val Thr	Asp 30 Trp Gln Ser	Asp Gly Leu Gln 95	Pro The Gln Ser 80
3 <i>5</i> 40 45	Leu Lys Ser 65 Pro Thr	Lys Leu Lys Ala 50 Cys Gly	Leu Phe- Ala 35 Pro Thr Arg	SEQUE Asn Pro 20 Lys Ser Pro Ile Ile 100	Leu 5 Gln Ala Phe Ser 85 Gln	E DE Cys Leu Ala Gln Arg 70 Cys	Ile Leu Asn Val 55 Pro Tyr	Prior Pro Leu 40 Thr Ser Ser	N: Si Asn Phe 25 Val Cys Thr Pro	Trp 10 Gln Glu Leu Leu Met	Ala Gly Ala Val Leu 75 Ser Val	Arg Glu Val Arg 60 Ala His	Cys Asp Pro 45 Val Thr	Asp 30 Trp Gin Ser Pro	Asp Gly Leu Gln 95 Tyr	Pro Ile Gln Ser 80 Val

	(2)	INFO	RMAT	MOE	FOR	SEQ	ID N	IO: 2	!54:				••			
5			(i) : (xi)	(<u>)</u> () ()	A) L: E) T O) T(ENGT: LPE : DPOL	H: 2: ami CGY:	l ami no ac line	ino a cid ear	acid		: 254	1 :			
10	Mec 1	Arg	Tyr	His	Äla 5	Gln	Leu	Ila	Phe	Cys 10		Phe	Cys	Xaa	Phe 15	Val
	Phe	Val	Kaa	Lys 20	Xaa											
15						•		٠.							-	
	(2)	INFO	DRMAT	NOI	FOR	SEQ	ID N	IO: 2	155 :				•			
20			(i) (() ()	A) Li B) T D) T	engt YPE: Opolo	H: 3: ami OGY:	l ami no ac line	ino a cid ear	acid			_			
3.5			(xi)	_				•		-						
25	Mec 1	Asn	Asp	Asn	Ser S	bro	Asn	His	Ser 	Ser 10	Ser	īyī	Leu	Pro	Leu 15	520
30	Leu	Thr	Ile	Val 20	Ile	Leu	Gln	Thr	Gly 25	His	Lys	ĞΊγ	Thr	Leu 30	Xaa	
	(2)	INFO	CAMPC	MOI	FOR	SEO	ID N	vo: 2	256:	٠.						
35	, = ,		(i) :	SEQUI	ENCE A) L	CHAI ENGT	RACTI H: 2		rics mino		ds					
			(xi)					lin PTIO		EQ II	ои с	: 25	б:			
40	Met 1	His	Phe	Leu	Phe 5	Arg	Phe	Ile	Val	Phe 10	Phe	Tyr	Leu	Trp	Gly 15	Leu
45	.Phe	Thr	Ala	Gln 20	Arg	Gln	Lys	Lys	Glu 25	Glu	Ser	Thr	Glu	Glu 30	Val	Lys
	Ile	Glu	Val 35	Leu	His	Arg	Pro	Glu 40	Asn	Cys	Ser	ŗňz	Thr 45	Ser	Lys	Lys
50	Gly	چيد 50	Leu	Leu	Asn	Ala	His 55	TYT	Asp	Gly	Tyr	Leu 60	Ala	Lys	Asp	Gly
5 5	Ser 65	Lys	Phe	Tyr	Cvs	Ser 70	Aŕg	Thr	Gln	Asn	Glu 75	Gly	His	Pro	Lys	€TT 08
-· -	Phe	Val	Leu	Gly	Val 85	Gly	Gln	Val	Ila	Lys 90	_	Leu	dsv.	Ile	Ala 95	Mec
60	Thr	Asp	Mec	Cys	Pro	Gly	Glu		Arg	Lys	Val	Val	Ile	920 110	520	Ser

	Phe	Ala	Tyr 115	Gly	Ļys	Glu	Gly	Tyr 120	Ala	Glu	Gly	Lys	Ile 125	Pro	510	Asp
5	Ala	Thr 130	Leu	Ile	Phe ·	Glu	Ile 135	Glu	Leu	Tyr	Ala	Val 140	Thr	Lys	Gly	520
10	Arg 145	Ser	Ile	Glu	Thr	2he 150	Lys	Gln	Ile	Asp	Мес 155	Asp	Asn	Asp	Arg	Gln 160
	Leu	Ser	Lys	Ala	Glu 165	Ile	Asn	Leu	Tyz	Leu 170	Gln	Arg	Glu	Phe	Glu 175	Ļys
15	yab	Glu	Lys	Pro 130	Arg	Asp	Lys	Ser	Tyr 185	Gln	Asp	Ala		Leu .190	Glu	Asp
	Ila	Phe	Lys 195	ŗàs	Asn	Asp	His	Asp 200	Gly	Asp	Gly	?he	Ile 205	Ser	SLO	Lys
20	Glu	Tyr 210	Asn	Val	Tyr	Gln	His 215	Asp	Glu	Leu	Kaa					
25	(2)	INFO	ORMAT	rion	FOR	SZQ	ID N	NO: 2	257:	-						
30			(i) :	(A) L B) T	ENGT YPE:	H: 5 ami	ERIST O am no ac lin	ino . cid		S	,	:	•.		
	Mar	•		SEQ	UENC:	E DE:	SÇRI!	PTION Gla	1: Si	-				Dho	152.1	. au
35	1				5					10					15	
				20					25			_		30		
40	Val	Cys	Met 35	ŗĀZ	Arg	Glu	Gly	Asp 40	Xaa	Asn	CÀR	Leu	Ser 45	Phe	Ser	Xaa -
	Leu	Хаа 50														-
45	(2)	INFO	ORMAI	MOIT	FOR	SEO	ID N	IO: 2	:58				•			
50			(i) :	SEQU (((ENCE A) L 3) T D) T	CHAI ENGT YPE: OPOL	RACTI H: 1 ami OGY:	ERIST 22 au no ac line PTICE	rICS mino cid ear	aci		: 258	3:			
55	Met 1	bro	Ser		Thr 5	Glu	Xaa	Phe	Ala	Ala 10		Gly	Gly	His	Ser 15	Leu
60	Leu	Leu	Val	Хаа 20	Leu	520	Leu	Gly	Leu 25	Pro	Phe	Cňz	Pro	A≠g 30	Ala	Ala.

	Leu	Cys	qaA 35	Leu	520	Phe	Ser	Leu 40	Pro	Ser	Phe	Sto.	Gly 45	Gln	Ala	Arg	
5	Arg	Gly 50	Gly	Ala	Glu	Lys	Gln 55	Gly	Ala	Glu	Gly	Arg 60	Gly	Leu	Gln	Val	
	Lys 65	Pro	Arg	Gly	Gln	Arg 70	Thr	Phe	Gln	Val	Ser 75	Arg	Thr	Ala	Pro	<u>Ala</u> 30	•
10	Ala	Pro	Yzâ	Ser	Arg 85	Gln	Pro	Arg		90 90	Ala	Ala	Leu	Pro	Ala 95	Leu	
15	Gly	Phe	Gly	Gly 100	Arg	GŢĀ	Val	Ala	Lys LOS	Glý	Arg	Phe	Leu	110 C\la	Phe	GIT	
10	Cys	Leu	Tyr 115	Mec	Leu	Arg	Ile	Asp 120	Gln	Xaa							
20	. (2)	TNE	orma:	T ON	żos	SEO	י חז	NO •	, , ,					٠			
25		TMF	(i)	SEQU () (ENCE A) L B) T	CHA ENGT : ESY : OPOL	RACT H: 8 ami CGY:	ERIS 18 am no a 11n	TICS inc cid	acid		: 25	9:				
30	Met 1		Ala								Ala			Leu	Leu 15	Sto	
	Arg	Thr	Mec	Ala 20		Pro	Gln	. Asp	Ser 25	Leu	Arg	Pro	Gly	Glu 30	Glu	Asp	
35	Glu	Gly	Меt 35		Leu	Leu	Gln	Thr 40		qzA	Ser	Met	Ala 45	Lys	Gly	Ala	
40	Arg	Pro 50	Gly	Ala	. Kaa	Arg	Gly 55		Ala	Arg	Trp	Gly 60		Ala	Tyr	Thr	
. •	Leu 63		His	Asn	Pro	Thr 70		Gln	. Val	Phe	75		Thr	Ala	Leu	Leu 80	
45	Gl _y	/ Ala	. Asn	. Gly	Ala 85		Pro	Хаа									
50	(2)	ENF	FORMA					NO: Teris	•								•
			(-/		(A) i	Lade Lade	ru: : am	26 ar ino a : li:	mino acid		is						
55				SEC	QUENC	CE DA	ESCRI	IPTIC	ON: S					·,			
		: Il∈ L	e Glr	ı Val	L Ser		. 210) Leu	l Leu	The		Mec	: Il=	: Phe	Leu 15	Leu	
60	$T_{\mathcal{Y}}$	Le	ı Gla	ıIle	e Gly	/ Pro	Gly	/ Lys	. Leu	ı Xaa	1						

20 25

	•	
5	(2) INFORMATION FOR SEQ ID NO: 261:	
10	(i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 29 amino acids (B) TYPE: amino acid (D) TOPOLCGY: linear (Xi) SEQUENCE DESCRIPTION: SEQ ID NO: 261:	
15	Met Leu Lau Asp Pro Phe Ile Lau Lau Phe Cys Lau Phe Sar Thr Ai 1 5 10 15	La
	Ala Gln Ser Cys Leu Glu Phe Ile Tyr Ile Gln Phe Kaa 20 25	
22 :		
20	(2) INFORMATION FOR SEQ ID NO: 262:	
	(i) SEQUENCE CHARACTERISTICS:	
25	(A) LENGTH: 44 amino acids (B) TYPE: amino acid	
	(D) TOPOLOGY: linear	
	(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 262:	
30	Met Lys Phe Leu Ser Ile Leu Leu Asp Asp Asn Asn Phe Kaa Leu Me 1 5 10 15	: 5
-	Leu Met Leu Ala Pro Phe Gly Cys Leu Ala Phe Glu Arg Ser Met Ly 20 25 30	'\$
35 -	Met Arg Asn Gly Ala Leu Gly Leu Glu Glu Val Kaa 35 40	
40		
70	(2) INFORMATION FOR SEQ ID NO: 263:	
	(i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 363 amino acids	
45	(B) TYPE: amino acid (D) TOPOLCGY: linear	
	(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 253:	
	Met Arg Thr Leu Phe Asn Leu Leu Trp Leu Ala Leu Ala Cys Ser Pr	0
50	1 5 10 15	
	Val His Thr Leu Ser Lys Ser Asp Ala Lys Lys Ala Ala Ser Ly 20 25 30	s
	Thr Lau Lau Glu Lys Sar Gln Phe Sar Asp Lys Pro Val Gln Asp Ar	Ţ
55	35 40 45	_
	Gly Leu Val Val Thr Asp Leu Lys Ala Glu Ser Val Val Leu Glu Hi	s

Arg Ser Tyr Cys Ser Ala Lys Ala Arg Asp Arg His Phe Ala Gly Asp

	65					70					75					80	
5	Val	Leu	Gly	Tyr	Vai 85	Thr	Pro	Trp	Asn	Ser 90	His ,	Gly	T/T	Asp	Val 95	Thr	
	ŗys	Val	Phe	Gly 100	Ser	Lys	Phe	Thr	Glá 105	Ile	Ser	920	Val	Trp 110	Leu	Gln	
.0	Leu	Lys	Arg 115	Yrg	Gly	Arg	Glu	Mec 120	?he	Glu	Val	Thr	Gly 125	Leu	His	qzA	
	Val	Asp 130	Gln	Gly	Txp	Met	Arg 135	Ala	Val	Arg	Lys	His 140	Ala	Lys	Gly	Leu	
.5	His 145	Ile	Val	Pro	Arg	Leu 150	L e u	Phe	Glu	Asp	Trp 155	Thr	Tyr	qz4	qzA	Phe 160	
20	Arg	Asn	Val	Leu	Asp 165	Ser	Glu	Asp	Glu	Ile 170	Glu	Glų	Leu	Ser	Lys 175	Thr	
	Val	Val	Gln	Val 180	Ala	Lys	Asn	Gln	His 185	Phe	Asp	Gly	Phe	Val 190	Val	Glu	
25	Val	Trp	Asn 195	Gln	Leu	Lau	Ser	Gln 200	Ĺys	Arg	Val	Thr	Asp 205	Gln	Fen	Gly	
	Mec	Phe 210		His	ГÀЗ	Glu	Phe 215	Glu	Gln	Leu	Ala	Pro 220	Val	Leu	Asp	Ğly	
30	Phe 225	Ser	Leu	Met	Thr	Tyr 230	Asp	îĀī	Ser	The	Ala 235		Gln	Pro	Gly	Pro 240	
35	Asn	Ala	. Pro	Leu	Ser 245	Trp	Val	Arg	Ala	Cys 250	Val	Gln	Val	Leu	Asp 255		
	Lys	Ser	. Lys	Trp 260		Ser	Lys	Ile	Leu 265		Gly	· Leu	. Asn	Phe 270		Gly	•
40	Met	. Asp	тут 275	Ala	Thr	Ser	Lys	Asp 280		Arg	Glu	Pro	Val 285		Gly	r Ala	•
	Arg	Ty: 290		Gln	Thr	· Lau	Lys 295		His	Arg	Pro	Arg 300		Val	Trp) Asp	,
45	Ser 305		ı Xaa	, Ser	Glu	His 310		. Phe	e Glu	ı Tyı	315		Ser	. Arg	; Sei	320	
50	Arg	y His	s Val	l Val	. Ph∈ 329		Pro) Thr	: Leu	130		. Leu	ı Glr	n Val	. Arg		1
	Glu	ı Le	u Ala	a Arg		ı Lev	ı Gly	/ Val	L Gl ₃ 349		. Sei	r Ile	e Tr	350		ı Gly	ć
55	Gli	n Gl	y Lei 35	ı Asg 5	Ty:	Phe	TYI	: Asg 360		ı Lev	ı Xaa	2					

			(<u>i</u>)	SEQU	ENCE	CHA	RACT	ERIS	TICS	:						
								.23 a		aci	.ds					
								no a								
5			(xi)	SEQ				lin PTIO		EQ I	D NO	: 26	4:			
	l Leu	Pro	Thr	Lys	Ile S	Leu	Val	ŗĀR	Pro	Asp 10	Arg	Thr	Phe	Glu	Ila 15	Lys
10	Ile	Gļy	Gln	910 20	Thr	Val	Ser	Tyr	Phe 25	Leu	Lys	Ala	Ala	Ala 30		Ile
15	Glu	Lys	Gly 35	Ala	Arg	Gln	Thr	Gly 40	Lys	Glu	Val	Ala	Gly 45	Leu	Val	Thr
	Leu	Lys 50	His	Val	Tyr	Glu	Ile 55	Ala	Arg	Ile	Lys	Ala 60	Gln	Asp	Glu	Ala
20	Phe 65	Ala	Leu	Glņ	Asp	Val 70	Pro	Leu	Ser	Ser	Val 75	Val	Arg	Ser	Ile	Ila 80
	Gly	Ser	Ala	Arg	Ser 85	Lau	Gly	Ila	Arg	Val 90	Val	Lys	Asp	Leu	Ser 95	Ser
25	Glu	Glu	Leu	Ala 100	Aia	Phe	Gln	Lys	Glu 105	Arg	Ala	Ile	Phe	Leu 110	Ala	Ala
30	Gla	Lys	Glu 115	Ala	Asp	Leu	Ala	Ala 120	Gln	Glu	Glu	Ala	Ala 125	Lys	Lys	Kaa
,,																
35																
, ,	(2)	INFO	ORMAC	rion	FOR	SEQ	ID 1	NO: 2	265 :							
			(i)	SEQUI									-			
10				-				4 am no a		acid	S					
			(xi)		T (C	OPOL	CGY:	lin	ear	EQ II	ON C	: 265	5 :			
	¥	T	·	61 -	-1-					_	_	_				
ļ5	mec 1	ren	Leu	Gln	Ila 5		Pro	Leu	Leu	10	Ser	Pro	Thr	Ile	Pro 15	His
	Ile	Leu	Leu	Ն շ ս 20	Phe	Leu	Tyr	510	Thr 25	Phe	Ser	Ile	Leu	Glu 30	His	Ser
5O.	Cys	Ser	Tyr 35	Cys	Il a	Glu	Tyr	Leu 40	Trp	Val	Cys	Leu	Leu 45	Phe	Cys	Leu
55	Ser	Leu 50	Trp	Phe	Leu	Kaa				•						
	(2)	INFO	ORMAG	NOIT	FOR	SEO	ID N	JO: 2	266:							

(i) SEQUENCE CHARACTERISTICS:

	(A): LENGTH: 29 amino acids (B) TYPE: amino acid	
	(D) TOPOLCGY: linear	•
	(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 256:	
5	•	
	Met Cys Leu Trp Cys Cys Gly Asp Val Cys Ser Gly Leu Ser Ser Leu	•
	1 5 10 15	
	Loui Core Loui Core Itali Core Com the little and t	
10	Leu Ser Leu Cys Val Cys Cys Val Val Leu Ala Val Cys 20 25.	•
	, 2 4	•
		-
		•
15	(2) INFORMATION FOR SEQ ID NO: 267:	
	(i) SEQUENCE CHARACTERISTICS:	• •
	(A) LENGTH: 26 amino acids	
	(3) TMPE: amino acid	
20	(D) TOPOLCGY: linear	
20	(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 267:	•
	Clu Cluster lands to the August and	
	Glu Gly Leu Arg Leu Leu Leu Ser Leu Pro Ala Ala Leu Pro Arg Ser 1 5 10 15	
	10 13 .	
25	Cys Cys His Pro Arg Trp Leu Pro Val Kaa	
	20 25	•
	,	
30 -	(2) INFORMATION FOR SEQ ID NO: 268:	*
•		
	(i) SEQUENCE CHARACTERISTICS:	
	(A) LENGTH: 221 amino acids	•
35.	(3) TYPE: amino acid (D) TOPOLOGY: linear	
	(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 268:	
	•	
	Met Phe His Gly Ile Pro Ala Thr Pro Gly Ile Gly Ala Pro Gly Asn	
40	1 5 10 15	
Ψ.	Lys Pro Giu Leu Tyr Glu Glu Val Lys Leu Tyr Lys Asn Ala Arg Glu	
	20 25 30	
	30	
	Arg Glu Lys Tyr Asp Asn Met Ala Glu Lau Phe Ala Val Val Lys Thr	
45	35 40 45	
	Man Cin all the Cin and the Ci	· ·
	Met Gln Ala Leu Glu Lys Ala Tyr Ile Lys Asp Cys Val Ser Pro Ser 50 55 60	
	33 90	
50	Glu Tyr Thr Ala Ala Cys Ser Arg Leu Leu Val Gln Tyr Lys Ala Ala	
	65 70 75 80	
	Phe Arg Gln Val Gln Gly Ser Glu Ile Ser Ser Ile Asp Glu Phe Cys	
55	95 90 95	
	Arg Lys Phe Arg Leu Asp Cys Pro Leu Ala Met Glu Arg Ile Lys Glu	
	100 105 110	•
60	Asp Arg Pro Ile Thr Ile Lys Asp Asp Lys Gly Asn Leu Asn Arg Cys	
	: 1.7	

507

	Ile Ala Asp Val Val Ser Leu Phe Ile Thr Val Met Asp Ly 130 135 140	ys Leu Arg
5	Leu Glu Ile Arg Ala Met Asp Glu Ile Gln Pro Asp Leu Ar 145 150 135	rg Glu Leu 160
10	Met Glu Thr Met His Arg Met Ser His Leu Pro Pro Asp Pt 165 170	ne Glu Gry 175
	Arg Gln Thr Val Ser Gln Trp Leu Gln Thr Leu Ser Gly Me 130 135 19	et Ser Ala 90
15	Ser Asp Glu Leu Asp Asp Ser Gln Val Arg Gln Met Leu Ph 195 200 205	ne Asp Leu
•	Glu Ser Ala Tyr Asn Ala Phe Asn Arg Phe Leu His Ala 210 215 220	
20		~
	(2) INFORMATION FOR SEQ ID NO: 259:	^
25	(i) SEQUENCE CHARACTERISTICS:(A) LENGTH: 3 amino acids(B) TYPE: amino acid	
	(D) TOPOLOGY: linéar	
	(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 269:	• 3
. 30	Met Lys Xaa	
	1	
35	(2) INFORMATION FOR SEQ ID NO: 270:	,
40	(i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 49 amino acids (B) TYPE: amino acid (D) TOPOLCGY: linear (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 270:	
		3 7
45	Met Gln Ala Pro Phe Xaa His Phe Ser Phe Arg Met Phe S 1 5 10	15
	Tyr Cys Phe Ser Asp Phe Gln Pro Asn Ile Ser Pro Cys P 20 25	30 . 30 .
50	His Cys Ile Leu Pro Xaa His His His Val Phe Leu Leu L 35 40 45	eu Ala Val
	<u>Yaa</u>	
55		
		~
	(2) INFORMATION FOR SEQ ID NO: 271:	
	(i) SEQUENCE CHARACTERISTICS:	

(A) LENGTH: 52 amino acids

(2) INFORMATION FOR SEQ ID NO: 274:

						YPE:										
			(xi)	() SEQU		OPOLO E DES				EQ II	NO.	: 271	L:			
5	Met 1	Lys	Leu	Val	Thr 5	Mec	9he	Asp	Lys	Leu 10	Ser	Arg	Asn	Aig	Val 15	Ila
10	Gln	Pro	Mec	Gly 20	Mec	Ser	Pro ·	Arg	Gly 25	His	Leu-	Thr	Ser	Leu 30	Glņ	Asp
	Ala	Met	Cys 35	Glu	Thr	Mec	Glu	Gln .40	Gln	Leu	Ser	Ser	Asp 45	Pro	Asp	Ser
15	qzA	Pro 50	Asp	Kaá												
20	(2)	INF	ORMA:	noit	FOR	SEQ	ŒD Ņ	JO: 2	272 :							
25 .				() ()	A) L 3) T D) T	ENGT YPE : OPOL	H: 3 ami CGY:	2 am no a lin	ino d cid ear	acid		27	.			
. C2	Met 1			SEQ:						-				Pro	P∵o 15	Leu
30	Leu	His	Gly	Ser 20	Pro	Ile	520	Lys	Leu 25	Leu	Pro	Gly	Pro	Leu 30	Leu	Xaa
35				. •				•							٠	
	(2)	INF	ORMA	TION	FOR	SEQ	וֹ מו	NO: 3	273:					•		
40			(i)	(A) L B) T		H: 5 ami	7 _. am .no a	ino cid	: acid	s					
45			(xi)	SEQ						EQ I	D NO	: 27	3:			
	Met 1		Gly	. C.i.e	His 5	Arg	Arg	Lys	Arģ	Leu 10	His	Leu	Cys	Lys	Thr 15	Ile
50	Tyr	. Leu	Leu	710 20	Phe	Val	Phe	Ser	Phe 25	Leu	Leu	Ser	Asn	Glu 30	Val	Val
-	Ser	· Ser	His	ŢŢ	His	Ile	Leu	Arg 40		Val	Gln	Ile	Ile 45	Cys	The	Leu
55	Phe	His 50		: Xaa 	Ile	Ser	Ala 55	Phe	Xaa							
					-											

```
(i) SEQUENCE CHARACTERISTICS:
                  (A) LENGTH: 22 amino acids
                  (B) TYPE: amino acid-
5
                  (D) TOPOLOGY: linear
            (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 274:
     Met Gly Trp Val Ser Ser Pro His Val Lys Arg Arg Glu Cys Val Leu
                              10
10
     Lys Lys Pro Phe Phe Kaa
           . 20
15
     (2) INFORMATION FOR SEQ ID NO: 275:
           (i) SEQUENCE CHARACTERISTICS:
                  (A) LENGTH: 51 amino acids
20
                   (B) TYPE: amino acid
                  (D) TOPOLOGY: linear
           (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 275:
     Met Phe Asn Phe Phe Lys Asn Pro Leu Leu Thr Cys Leu Phe Ile Ser
25
                    5
                                      .10
     Cys Tyr Leu Tyr Leu Ser Leu Leu Val Asn Lys Val Leu Phe Ala Glu
                     25 30
                 20
30
     Glu Gly Leu Cys Cys Thr Tyr Cys Thr Thr Ser Asn Thr Gly Glu Gly
                              40
     Gly Val Kaa
         50
35
    (2) INFORMATION FOR SEQ ID NO: 276:
40
           (i) SEQUENCE CHARACTERISTICS:
                  (A) LENGTH: 2 amino acids
                   (3) TYPE; amino acid
                   (D) TOPOLOGY: linear
            (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 276:
45
     Mèt Xaa
       1
50
     (2) INFORMATION FOR SEQ ID NO: 277:
            (i) SEQUENCE CHARACTERISTICS:
                  (A) LENGTH: 66 amino acids
55
                  (B) TYPE: amino acid
                  (D) TOPOLOGY: linear
            (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 277:
     Met Leu Cys Thr Ile Leu Thr Val Val Ile Ile Ile Ala Ala Gln Thr
60
      1 5
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	Thr	Arg	Thr	Thr 20	Gly	Ile	Pro	Lys	Asn 25	Ala	Pro	Gly	Pro	Ala 30	520	Leu				
5	CÀa	Ala	Pro 35	Arg	Ser	Pro	Arg	Leu 40	Phe	Leu	Gln	Kaa	Tyr 45	Arg	Gly	Pro	٠			
10	Asn	Gly 50	Arg	Pro	Ala	His	₽±0 55	Phe	Leu	Gly	Pro	Ser 60	Asp	Leu	Asp	Thr	. •			
	Ser . 65	Xaa				-	-		•											
15 .	(2)	INF	ORMAI	rion	FOR	SZQ	; ID !	IO: 2	278:			-								
20			(i).	()		engt: Ype :	H: 2 ami	57 a no a	mino cid	: aci	ds		-							
			(xi)							EQ II	ON C	: 278	3 :							
25	Mec 1	Leu	Gly	Ala	Lys 5	Pro	His	Trp	Leu	Pro 10	Gly	Pro	Leu	His	Sar 15	Pro				
	Gly	Leu	920	Leu 20	Val	Leu	Val	Leu	Leu 25	Ala	Leu	Gly ,	Ala	.30	Trp	Ala				
30	Gln	Glu	Gly 35	Ser	Glu	Pro	Val	Leu 40	Leu	Glu	Gly	Glu	Cys 45	Leu	Val	Val				
35		50	Pro				55					60								
	65		Ala			70				•	75					80				
40			Glu		85				-	90					95					
45			Asp	100				-	105					110						
			Ser 115					120					125							
50		130					135					140				Met	••			
	·145		Thr			150					155				-	160	. •	•		
55				ż	165					170					175	Gly.		,		
60	•	•	Val Leu	180				-	185					190	•	•		 ÷	٠.	-
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•	920	Sar 210	Lau	Ser	Ser	The	Arg 215	ii.	Gla	Pro	Leu	Thr 220	Thr	Phe	Phe	Cys
5	9 1 3 225	Leu	Leu	?≃≎	Хаа	Lys 23:	Gla	Yaa	Lys	Gln	Xaa 235	Kaa	Хаа ·	Ser	Lau	Trp 240
10	Lau	Leu	Ser	∺≟s	Lau 245	Pna	Ala	Tap	Glu	Pro 250	Val	Pro	Asn	The	Gln 255	Val
	Хаа		٠.													
15							7.	-			•			•		
	(2)	⊐ æ(TECN	FCP.	SEÇ	ID :	XC: 2	279:							
20		•	(<u>i</u>) .	<u>(</u> .	A) I B) T	DIGT 175:	PACT H: 1 amí	تة دن بة 30	mino cid		ds				٠.	
			(x <u>i</u>)				CGY: SC71:			EQ II	OM C	: 27!	9:.		-	
25	Met 1	Ala 	223	Arg	Ala 5		320	Gly	Ser	Ala 10	Val	Leu	Ala	Ala	Ala 15	Val
30	Pile	∵al	Gly	Gly 20	Alæ	Val	Ser	Ser	Pro 25	Leų	Val	Ala	Pro	Asp 30	Asn	Gly
	Ser	Ser	Arg 35	The	Lau	His	Ser	Arg 43	Thr	Glu	Thr	Thr	Pro 45	Ser	Pro	Ser
35	Asta	وعد 50 -	<u> </u>	GŢĀ	Asn	Glÿ	His SS	720	Glu	Tyr	Ile	Ala 60	Tyr	Ala	Leu	Val
	PT0 65	Val	Phe	Phe	īla	Met 7:	G≟⁄	Leu	Phe	Gly	Val 75	Leu	Ile	Xaa	Pro	Хаа 80
40	Хаа	ïaa	Lys	Lys	Lys 85	Gly	Tyt	Arg	Cys	Thr 90	Thr	Glu	Ala	Glu	Gln 95	Asp
4 <i>5</i> -	Ile	Glu	Glu -	Glu 100	Lys	Gly	Kaa				-					
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50			(i) :	t. (:	A) L 3) T	enge Yfe:	RACTI H: 3 ami: CGY:	ms an	ino . cid		s					
5 <i>5</i>			(x <u>i</u>)				SCRI			EQ II	O NO	: 23() :			
	Met 1	3 2 0	7al	Thr	Leu 5	Ser	Ser	Leu	Gly	Phe .10	GZĮ	Val	Leu	Lau	Ser 15	Leu
50	Leu	Phe	320	T	Arg	TLE	çek	Gln	Gly	Cys	Gly	Pro	Ala	Thr	Cys	T/T

Xaa 5 (2) INFORMATION FOR SEQ ID NO: 231: (i) SEQUENCE CHARACTERISTICS: 10 (A) LENGTH: 43 amino acids (B) TYPE: amino acid (D) TOPOLOGY: linear (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 281: 15 Mec Val Leu Gly Leu Leu Leu Leu Xaa Phe Phe Ser Phe Ser Ser 5 10 Ser Pro Ser Pro Ser Ser Ser Leu Leu Leu Leu Ser Ser Phe Phe Phe 25 ... 30 20 20 Gln Ser Leu Ala Leu Ser Pro Arg Leu Glu Kaa ` 35 40 25 (2) INFORMATION FOR SEQ ID NO: 292: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 21 amino acids 30 (B) TYPE: amino acid (D) TOPOLOGY: linear (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 282: Glu Trp Leu Val Phe Thr Phe Leu Leu Val Phe Gly Ser Pro Leu Gly 35 10 5 . Lys Gly Pro Leu Kaa . 20 40 (2) INFORMATION FOR SEQ ID NO: 283: (i) SEQUENCE CHARACTERISTICS: 45 (A) LENGTH: 70 amino acids (B) TYPE: amino acid (D) TOPOLOGY: linear (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 293: 50 Met Ile Arg Ala Leu Ser Leu Phe Leu Leu Ile Phe Asp Ala Ala Leu 5 Phe Ser Leu Ser Val Phe Val Phe Ile Gly His Leu Leu Pro Met Pro 20 25 55 Lys Gly Thr Gly Leu His Ser Cys Ala Lys His Leu Ile Lys Ser Leu 40

Lys Glu Asn Val Leu Pro Leu Met Asn Tyr Pro Asp Cys Lys Leu Lys

55

Ile Asm Ile Ser Pro Kaa 63 5 (2) INFORMATION FOR SEQ ID NO: 284: (i) SEQUENCE CHARACTERISTICS: 10 (A) LENGTH: 75 amino acids (B) TYPE: amino acid (D) TOPOLOGY: linear (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 284: 15 Met Gly Lys Leu Ile Arg Leu Ser Val Met Val Met Ser Val Arg Arg 1 . ___ 5 Leu Phe Ser Ile Tyr Trp Val Leu Ser Thr Val Pro Asp Ala Val Gly . 20 20 Ser Arg Gly Gly Met Glu Glu Glu Cys Ser Arg Gly Leu Cys Cys Val 35 40 Ala Gly Gln His Lys Gln Ala Lys Gly Lys Arg Gln Ala Trp Asn Lys 25 55 . 60 Gly Gly Glu Tyr Gln Cys Val Thr Tyr Cys Kaa 70 75 30 (2) INFORMATION FOR SEQ ID NO: 285: (i) SEQUENCE CHARACTERISTICS: 35 (A) LENGTH: 33 amino acids (B) TYPE: amino acid (D) TOPOLOGY: linear (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 285: 40 Met Pro Ala Leu Val Thr Leu Leu Leu Phe Pro Leu Leu Pro Leu 5 10 Met Glu Ala Ser Cys His Val Met Arg Cys Pro Met Glu Arg Pro Thr 25 30 45 50 (2) INFORMATION FOR SEQ ID NO: 286: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 17 amino acids 55 -(B) TYPE: amino acid (D) TOPOLOGY: linear (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 236: Glu Ala Pro Trp Gly Leu Leu Lys Leu Leu Leu Leu Ala Val Phe 60 10

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Xaa
5
     (2) INFORMATION FOR SEQ ID NO: 287:
           (i) SEQUENCE CHARACTERISTICS:
10
                (A) LENGTH: 17 amino acids
                  (B) TYPE: amino acid
                 (D) TOPOLOGY: linear
         (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 287:
     Met Gln Gln Lys Gln Lys Lys Ala Asn Glu Lys Lys Glu Glu Pro Lys
                    5.
                                     10 -
     Xáa
20
   (2) INFORMATION FOR SEQ ID NO: 238:
          (i) SEQUENCE CHARACTERISTICS:
               (A) LENGTH: 38 amino acids
                  (B) TYPE: amino acid
                  (D) TOPOLCGY: linear
            (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 288:
30
   Met Gln Arg Lys Val Ser Asp Phe Ile Ile His Gln Arg Leu Thr Val
  Asn Leu Cys Val Ile Ser Phe Phe Phe Phe Leu Pro Ile Cys Ile Phe
          20 25
     Ser Leu Ala Lys Lys Xaa
        . 35
40-
    (2) INFORMATION FOR SEQ ID NO: 289:
            (i) SEQUENCE CHARACTERISTICS:
45
                  (A) LENGTH: 12 amino acids
                  (B) TYPE: amino acid
                  (D) TOPOLOGY: linear
           (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 289:
50
     Met Ala Leu Leu Ile Ser Ser Leu Ile Trp Ser Xaa
       1 . 5
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(2) INFORMATION FOR SEQ ID NO: 290:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 35 amino acids
(B) TYPE: amino acid

(D) TOPOLOGY: linear

55

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 296: Met Gln Met Phe Thr Val Ser Leu Leu Leu Ser Leu Leu Leu Arg Ser 10 5 Thr Asp Gln Asn His Leu Gln Leu Leu Val Gly Arg Glu Asp His Tyr Gly Gly Xaa 10 35 (2) INFORMATION FOR SEQ ID NO: 291: 15 (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 15 amino acids · (B) TYPE: amino acid (D) TOPOLOGY: linear 20 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 291: Met Ser Glu Ser Ala Cys Ile Leu Asn Asn Gln Lys Glu Leu Kaa · 5 15 10, 25 (2) INFORMATION FOR SEQ ID NO: 292: (i) SEQUENCE CHARACTERISTICS: 30 (A) LENGTH: 44 amino acids (B) TYPE: amino acid (D) TOPOLOGY: linear (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 292: 35 Met Asp Leu Asp Arg Val Lys Ala Glu Ala Thr Glu Asp Ile Thr Ser . 5 Gly Val Leu Cys Leu Leu Phe Leu Arg Leu Pro Pro Asn Ser Cys Ile 25 40 Phe Pro Ser Ala Val Leu Gly Ser Thr Arg Thr Kaa 35 40 45 (2) INFORMATION FOR SEQ ID NO: 293: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 136 amino acids 50 (B) TYPE: amino acid (D) TOPOLOGY: linear (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 293: Val Val Gly Thr Gly Thr Ser Leu Ala Leu Ser Ser Leu Leu Ser Leu 55 10

Leu Leu Phe Ala Gly Met Gln Met Tyr Ser Arg Gln Leu Ala Ser Thr

Glu Trp Leu Thr Ile Gln Gly Gly Leu Leu Gly Ser Gly Leu Phe Val

		-	35					40					45			
5	Phe	Ser 50	ren	Thr	Ala	Phe	Asn 55	Asn	Leu	Glu	Asn	Leu 60	Val	Phe	Gly	Lys
J	Gly 65	Phe	Gln	Ala	ŗàz	Ila 70	Phe	Pro	Glu	Ile	Leu 75	Leu	Cys	Leu	Leu	Leu 80
10	Ala	Leu	Phe	Ala	Ser 85		Leu	Ile	His	Arg 90	Val	Cys	Val	Thr	Thr 95	Cys
•	Phe	Ile	?he	Ser 100	Mec	Val	Gly	Leu	Tyr 105	Tyr	Ile	Asn	Lys	Ile 110	Ser	Ser
15	Thr	Leu	T/T 115	Gln	Ala-	Ala	Alā	Pro 120	Val	Lau	Thr	Pro	Ala 125	Lys	Val	The
20,	Gly	Lys 130	Ser	Lys	Lys	Arg	Asn 135	Kaa								
	(2)	INF	ORMAI	noin	FOP.	SEQ	ID 1	10: 2	294:		•					٠
25			(i)::	(A) L B) T	engt Ype :	RACT H: 3 ami CGY:	4 am	ino cid		s.					
30			(xi)	SEQ	UENC	E DE	SCRI	PTIO	N: 5	EQ I	D NO	: 29	4:			
	Met 1	Phe	Ile	Phe	Leu 5	Phe	Leu	Cvz	Val	Leu 10	Ser	Arg	Lys	Ile	Gln 15	Glu
35	Glu	Tyr	Tyr	Arg 20	Leu	Phe	Lys	Asn	Val 25	Pro	Cys	Cys	Phe	Gly 30	Cys	Leu
	Arg	Xaa														
40									^							
·	(2)	INF	ORMA	rion	FOR	, SEQ	ID i	NO:	295 :							٠
45			(<u>i</u>)	(A) L E) T	engi Ype :	RACT H: 1 ami .CGY:	.37 a .no a	mino .cid		.ds					
			(xi)	SEQ	UENC	E DE	SCRI		N: S	EQ I	D NO	: 29	5 :			
50	Mec 1							PTIC						Leu	Ala 15	Gly
	1		The	Pro	Gly 5	Pro	Leu	PTIC Pro	Val	Leu 10 Thr	Leu	Leu	Leu	•	15	Gly
50 55	Ala	Pro	Thr	Pro Ala 20	Gly 5 Arg	Sic	Leu	PTIC Pro	Val Pro 25	Leu 10 Thr	Leu Cys	Leu Tyr	Leu Ser	Azg 30	15 Mec	

(2) INFORMATION FOR SEQ ID NO: 298:

	Ile 65	His	Asn	Tyr	Cys	Val 70	Leu	Asp	Lys	Leu	Arg 75	Asç	.?he	Val	Ala	Ser 30	
3	520	Pro	Cys	Trp	Lys 85	Val	Ala	Gln	Val	qzA 00	Ser	Leu	Lys	ġz¢.	95 FĀ2	Ala	
10	Arg	Lys	Leu	Tyr 100	The	Ile	Mec	Asn	Ser 105	Phe	Cys	Arg	Arg	Asp 110	Leu	Val	
	Phe	Leu	Leu 115	Asp	Asp	Cys	Asn	Ala 120	Leu	Glu	Tàr	510	Ile 125	Pro	Val	Thr	
15	Thr	Val 130	Leu	Pro	dsy.	Arg	Gln 135	Arg	Kaa								
20	(2)			rion Sequi		_	-			:							
25		-	(:ci)	C	3) T D) T	YPE: OPOL	ami: CGY:	no a	cid ear	acid		: 29	6 :				
	Met 1	Trp	Leu	Leu	Lys S	Pro	Ser	Ala	His	Ser	Pro	 Val	Hiş	Kaa	Leu 15	Val	
30	Leu	Leu	Phe	Pro 20	Arg	Gly	ŢŢĐ	Ser	Gln 25	Pro	Gly	Thr	His	Lys 30	Arg	Gln	
3 <i>5</i>	Ile	Leu	Val 35	Asn	Xaa	Ala	Ser	Leu 40	Pro	Gly	Glχ	Cys	Leu 45	Leu	Pro	Trp	
	Ile	717 50	Ser	Gly	Ala	Ala	Leu 55	Arg	Phe	Kaa	,						
40	(2)	INFO	ORMA	rion	FOR	seq.	ID N	JO: 2	297 :								
4 5 ,	•			. (A) L B) T D) T	engt YPE : OPOL	H: 3 ami OGY:	5 am no a lini	ino cid ear	acid		: 29	7:			-	
50	Met 1	Ser	Arg.	Arg	Ala S	Glu	Ala	Ser	Ile	Phe 10	Val	Leu	Pro	Ľys	Thr 15	Leu	
	Leu	Phe	Val	Leu 20	Phe	Pro	Ala	Phe	Pro 25	Ser	Pro	Ala	Val	30 30	Cys	Pro	
55	Val	STO	Хаа 35	:·													

	٠		(i)	SEQUE													
							H: 79			acid	S						
5							ami: :YCC:										
•			(xi)	SEQU						EQ II	ON C	: 29	3 :				
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	Ser	Cys	ī	Ile	Thr	510	ŒΣΤ	Ser	ŗ'ns	Ila 10	Gln	Ser	Phe	Ser	Leu 15	Ser	
10	Ţ				2					10					13		
	Leu	Phe	Gln	Phe	Ile	Leu	Gln	Glu	Val	Asn	Ile	Thr	Leu	Pro	Glu	Asn	
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15	361	vai.	35	TÄT	GILL	a. y		. 40	7116	بإجد	714	0	45	21162		264	
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	Asn		Gln	Phe	Leu	Mec		His	Arg	Val	Asn		Ser	Lys	Leu	Glu	
		50					55					60					
20	Lvs	Gln	Leu	Leu	Lvs	Leu	Glu	Glm	Gln	Ser	Thr	Gly	Xaa	Xaa			
	65				•	. 70					75	-					
			•														
25	(2)	INF	ORMA:	rion	FOR	SEQ	ID N	·10 : 3	299:								
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•	•		(i)	SEQUI '		•	RACT: H: 9				.						
		•		-			ami				_	,					
30							OGY :										
			(xi)	SEQ	UENC	E DE	SCRI	PTIO	N: S	EQ I	D NO	: 29	9:				
	Met	Phe	Val	Lėu	2he	Ser	Leu	Pro	Lys	Tyr	Ala	Gly	Leu	Arg	Leu	Pro	
	1				5				-	10					15	•	
35	71 -	3	61.	•		.1.	*		*** 1	Dha	t au	Ť 0	Car	T au	Dha	ea=	
	115	Pro	GIĀ	Leu 20	Ser	Ala	Leu	Leu	25	rne	ren	reu	267	30	File	267	
								•		i							
40	· Arg	Arg			Val	Glu	Leu		Thr	Gly	Arg	Glu	_	Leu	Pro	Lys	
40			35					40					45				
	Asn	Ļeu	Gln	Gly	Tyr	Phe	Pro	Glu	Phe	Gly	Phe	Gln	Val	Gln	Asn	Phe	
		50					55					50		•			
45		C	. C		71-			37.	C	~1 -	*	/ Cl-	2~0	T.au	8~2	P=0	
73	65		. Cys	Lys	TTE	70		Ala	36.	نندى	دون 75			200		80	
4	Leu	Tyr	Glr	Leu			Tyr	Leu	Lys			Gly	Leu	Pro			
50				•	85					90					95		
							•										
	(2)	INE	ORMA	TION	FOR	SEQ	ID	: OM	300:								
55			(i)	SEQU	JENCE		LRACT	TRIS	TICS	:							
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			(eci) SE(LOGY: ESCRI			EO I	D NO	o: 30	00:				
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	Mec 1	Ser	Ser	His	Trp 5	Thr	Leu	Lys	Ile	Leu 10	Lau	Val	910	Lau	Phe 15	Tyt
5	Leu	Ser	Leu	Glu 20	Phe	Pro	Ser	Gly	Phe 25	Val	Leu	Cys	Leu	Ala 30	Asn	925
	Leu	Gly	Tyr 35	His	Phe	Ser	Ser	Arg 40	Val	Arg	Ser	Каа	ud Kan	ere na		
10	•			•												
	(2)	INF	ORMA:	rion	FOR	SEQ	ID I	NO: .	301:							
15				(A) L B) T D) T	engt YPE : OPOL	H: 3 ami CGY:	l am no a lin	ear	acid		3.0	*			•
20		_							N: S							
20	Met 1	Leu	Vai	Val	Asn 5	Ile.	Asn	Leu		Phe 10	Leu	Leu	Phe	Phe	Ile 15	Phe
25	Leu	Ċās	Tyr	Leu 20	Aspi	Ala	Cys	Ile	Asn 25	Val	Phe	Cys	Phe	Ty± 30	Xaa	

	(2)	INF	ORMA	rion	FOR	SEQ	ID N	10: 3	302:							
30			:	(A) L B) T D) T	engt YPE : Opol	H: 1 ami CGY:	13 a no a lin	ear	aci		. 30	n .			
30 3 <i>5</i>	Mar		(xi)	() () SEQI	A) L B) T D) T UENC	ENGT YPE: OPOL E DE:	H: 1 ami CGY: SCRI	13 a no a lin PTIO	mino cid ear N: Si	aci	ON C					
	Met 1		(xi)	() () SEQI	A) L B) T D) T UENC	ENGT YPE: OPOL E DE:	H: 1 ami CGY: SCRI	13 a no a lin PTIO	mino cid ear N: Si	aci	ON C			Leu	Thr 15	Leu
	1	Pro	(xi) Val	() () SEQI	A) L B) T D) T UENC Pro 5	ENGT YPE: OPOL E DE: Gly	H: 1 ami CGY: SCRI Arg	13 a no a lin PTIO	mino cid ear N: Si	aci EQ II Ala 10	D NO Leu	Leu	Ser		15	
35	l Ala	Pro	(xi) Val Ala	() () SEQUE Leu Val 20	A) L B) T D) T UENC Pro S	ENGT YPE: OPOL E DE: Gly Cys	H: 1 ami CGY: SCRI Arg Ser	13 a no a lin PTIOM Thr	mino cid ear N: Si Thr Val 25	aci EQ II Ala 10 Glu	D NO Leu Ala	Leu Gly	Ser Pro	Cys 30	15 Val	
35	Ala Arg	Pro Phe Ser	(xi) Val Ala His 35	() () () SEQNORMAL Leu Val 20 Gly	A) L B) T D) T UENC Pro 5 Pro Cys	ENGT YPE: OPOL E DE: Gly Cys	H: 1 ami CGY: SCRI Arg Ser	13 a no a lin PTION Thr Gly Trp 40	mino cid ear N: Si Thr Val 25 Glu	acide Ala 10 Glu Ala	D NO Leu Ala Ser	Leu Gly Val	Ser Pro Cys 45	Cys 30 Val	15 Val Thr	Pro .
35 40 45	Ala Arg Ser	Pro Phe Ser Thr	(xi) Val Ala His 35	() () () () () () () () () () () () () (A) L B) T D) T UENC: Pro Pro Cys Gly	ENGT YPE: OPOL E DE: Gly Cys Ser	H: 1 ami CGY: SCRI Arg Ser Ser Trp 55	13 a no a lin PTION Thr Gly Trp 40 Arg	mino cid ear N: Si Thr Val 25 Glu	acide Ala 10 Glu Ala Arg	D NO Leu Ala Ser Ala	Leu Gly Val Leu 60	Ser Pro Cys 45	Cys 30 Val :	15 Val Thr Ser	Pro Ser
35	Ala Arg Ser Ala 65	Pro Phe Ser Thr 50	(xi) Val Ala His 35 Pro	(()()()()()()()()()()()()()()()()()()(A) L B) T D) T UENC: Pro 5 Pro Cys Gly Xaa	ENGT. YPE: OPPOLICE DE: Gly Cys Ser Ser Ala 70	H: 1 ami. CGY: SCRI: Arg Ser Ser Trp 55 Ala	13 a no a lin a li	mino cid ear N: Si Thr Val 25 Glu Ala	aci. EQ II Ala 10 Glu Ala Arg	D NO Leu Ala Ser Ala Pro 75	Leu Gly Val Leu 60	Ser Pro Cys 45 Phe	Cys 30 Val Pro	15 Val Thr Ser	Pro Ser Ala Gly 80
35 40 45	Ala Arg Ser Ala 65 Asp	Phe Ser Thr 50 Trp	(xi) Val Ala His 35 Pro His	() () () () SEQUENT CONTROL () () Control ()	A) L B) T D) T UENC: Pro 5 Pro Cys Gly Xaa Gly 85	ENGT. YPE: OPPOLICE DE: Gly Cys Ser Ser Ala 70 Ala	H: 1 ami. CGY: SCRI: Arg Ser Ser Trp 55 Ala Mec	13 a no a lin a li	mino cid ear N: Si Thr Val 25 Glu Ala Asp	aci. EQ II Ala 10 Glu Ala Arg Ser Ala 90	D NO Leu Ala Ser Ala Pro 75	Leu Gly Val Leu 60 Trp	Ser Pro Cys 45 Phe Thr	Cys 30 Val Pro Gln	15 Val Thr Ser Thr Gly 95	Pro Ser Ala Gly 80 Gly

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(2) INFORMATION FOR SEQ ID NO: 303:
             (i) SEQUENCE CHARACTERISTICS:
  5
               . (A) LENGTH: 14 amino acids
                    (B) TYPE: amino acid
                    (D) TOPOLOGY: linear
             (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 303:
 10
    Thr His Ile His Thr His Ile Ile Ile Cys Ser Ser Val Kaa
       1 5
    (2) INFORMATION FOR SEQ ID NO: 304:
             (i) SEQUENCE CHARACTERISTICS:
                   (A) LENGTH: 35 amino acids
                    (B) TYPE: amino acid
 20
                   (D) TOPOLOGY: linear
             (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 304:
      Met Glu Asn Phe Phe Phe Ser Phe Tyr Leu Phe Leu Ile Thr Leu Ile
               5
                                         10
 25
      Pro Asn Gly Arg Thr Leu Ser Thr Thr Ala Asp His Cys Lys Ile Pro
                                      25
      Cys Ile Xaa
 30
               35
       (2) INFORMATION FOR SEQ ID NO: 305:
 35
              (i) SEQUENCE CHARACTERISTICS:
                  (A) LENGTH: 15 amino acids
                    (B) TYPE: amino acid
                    (D) TOPOLOGY: linear
 40
              (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 305:
       Met Glu Leu Tro Glu Leu Ala Leu Cys Leu Leu Val Ala Leu Ser Ala
: 45
       His Met Phe Thr Val Gln Leu Leu Ala Asp Leu Gly Phe Leu Phe Gly
                               25
       Gly Phe Xaa
               35
 50
       (2) INFORMATION FOR SEQ ID NO: 306:
 วีวี
              (i) SEQUENCE CHARACTERISTICS:
                    (A) LENGTH: 32 amino acids
                     (B) TYPE: amino acid
                     (D) TOPOLOGY: linear
              (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 306:
 60
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	Kec 1	GŢĀ	Ala	Bly	:11±	Cer	àia ,	lau	F€ī	Leu 10	510	Leu	Glu	Ser	Val 15	ŗeu
5	Thr	Cys	Ser	25 25	Ile	Sar	Val	Ser	25	Ser	Glu	Arg	Gln	Leu 30	Trp,	Gln
	Sar	Ser	315 315	Lys	Ala	Tar	:i=	1eu 40	Sar	Lau	Lys	Lau	Asp 45	Ser	CÃ2	Phe
10	Cys '	Gly 50	<u>Hi</u> s	Ser	Gly	Ten	Lys 55	Gly	Lys	Asn	Glu	Asp 60	Thr	gz4	Ser	Ser
15	7al 65	920	Ile	Ile	720	5 6 2 70	Lys	Tax	# 13	Thr	His 75	Leu	Gly	Lys	His	Leu 30
	Ile	Xaa									•					
20	(2)	Diev	org:	icn	FCR	ಕಾಂ	D	: : : : : : : : : : : : : : : : : : :	307:							
25		٠	(<u>i)</u>	(A) L	<u> ZiGi</u>	H; 7	===S 2 am	iro		s					
رخ			(xi)	(D) T	CPCL	ogi:	no a lin PTIC	ear	EQ I	D NO	: 30	7:			
30	,Ket 1	Phe	774	?he	Val	Leu	Phe	Ile	Tyz	Ser 10	Ser	Ser	Glu	Thr	Trp 15	Ser
	GŢĀ	`Ser	Val	Ala 20		æp	Gly	Val	His 25	Gly	Val	Ile	.Ile	Glỳ 30	His	Cys
35	Ser	Val	Glu 35	Leu	Pro	'Gly	Ser	Gly 40	çek	Pro	Pro	Ala	Ser 45	Ala	Хаа	Leu
4 0	Val	Ala 50		<u> </u>	īla	GLY	Tit	Cita	220	Thr	Mec	9ro 60	Gly	Phe	Val	Tyr
	Phe 63	Leu	Asn	Asp	Val	70 70	Asn	<u>Иаа</u>			٠					
45	(2)	DE	CPA:	Tion	FCF.	SEQ	Ð	NO:	308:							
5 0			(i)	((A) I	<u> Pigi</u>	H: 3	ERIS 4 am no a	ino		is					
			(xi)	((D) T	:090I	CG!	lin PTIC	ear	EQ I	D NO	: 30	8 :			
5 5	Mac 1		Ser	The	3		GĽn	Gly	Yrg	Жаа 10	Leu	Leu	The	Leu	Val 15	Pro
	Ala	Ser	Leu		Ser	Lau	Thr	Lau	Gly 25	_	Pro	Gly	Pro 、	Txp 30	Lys	Asp.
60		••-														

5	(2) INFORMATION FOR SEQ ID NO: 309:	
10	 (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 115 amino acids (2) TYPE: amino acid (D) TOPOLOGY: linear (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 309: 	
15	Met Gln Val Val Gly Ser Trp Pro Gly Arg Val Gly Val Val Gly Leu 1 5 10 13	
	Ala Phe Ser Leu Val Ile Pro Pro Pro Ala Ile Cys Ile Ala Gly Pro 20 25 30	
20	Ala Pro Gly Leu Gly Gly Gly Glu Arg Gln Gln Lys Gly Leu Gly Arg 35 40 45	
	Gly Gly Gly Leu Arg Asn Cys Pro Gly Arg Val Gly Met Ala Ala 50 55 60	
25	Glu Pro Gly Ala Leu Leu Cys Leu Thr Ser Arg Asp Gly Ser Leu Leu 65 70 75 80	
30	Leu Ser Cys Val Arg Pro His His Val Ile Lys Pro Lys Gly Thr Ala 85 90 95	
	Lys	
35	Gly Gly Kaa 115	
	(2) INFORMATION FOR SEQ ID NO: 310:	
40	(i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 108 amino acids (B) TYFE: amino acid	
45	(D) TOPOLOGY: linear (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 310:	
	Met Asp Leu Pro Gln Phe Ile Tyr Leu Phe Ile Phe Cys Phe Cys Cys 1 5 10 15	
50	Leu Ala Ile Val Asn Asn Ala Ser Ile Asn Ile His Ile Gln Val Ser 20 25 30 .	
55	Met Trp Leu Tyr Val Phe Ile Ser Leu Gly Tyr Leu His Gly Ser Arg 35 40 45	
	Ile Leu Gly His Asn Ile Ile Leu Cys Leu Thr Ser Gln Arg Ile Ala 50 55 60	
60	Lys Arg Phe Phe Ile Val Ala Ala Ser Phe Thr Phe Pro Pro Ala Met 65 70 75 80	

•	Tyr Lys Asp Phe Tyr Phe Ser Ile Ser Leu His Leu Pro Thr Leu Leu 85 90 95
3	Phe Kaa Kaa Raa Phe Val Phe Ser Leu Leu Pro Pro 100 105
10	(2) INFORMATION FOR SEQ ID NO: 311:
15	(i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 65 amino acids (B) TYPE: amino acid (D) TOPOLCGY: linear (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 311:
20	Met Cys Ser Pro Ser Leu Ser Ser Ser Pro Pro Pro Leu Leu Gln Val 1 5 10 15
	Phe Phe Phe Phe Phe Ser Pro His Trp Ala Ala Lys Val Val Pro 20 25 30
25	Gln Trp Lys Kaa Arg His Pro Gln Val Ser Ser Gln Leu Leu Cys 35 40 . 45
	Phe Leu Arg Val Asn Cys Gln Phe Leu Phe Leu Gln Glu Ile Leu Phe 50 55 60
30	Х <u>аа</u> 65
35	(2) INFORMATION FOR SEQ ID NO: 312:
40	(i) SEQUENCE CHARACTEPISTICS: (A) LENGTH: 50 amino acids (B) TYPE: amino acid (D) TOPOLOGY: linear (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 312:
45	Met Cys Leu Ser Arg Trp Lys Ile Phe Tyr Thr Leu Leu Ile Leu Phe 1 5 10 15
	Xaa Xaa Phe Ser Ile Thr Ser Glu Xaa Glu Thr Phe Tyr Met Ile Ile 20 25 30
50	Ile His His Asn Pro Thr Gln Ile Thr Ala Ser Cys Ser Phe Thr Phe 35 40 45 Leu Xaa
55	50
	(2) INFORMATION FOR SEQ ID NO: 313:

(A) LENGTH: 293 amino acids

290

(3)	TYPE:	amino	acid	
(D)	TOPOLO	GY: 1:	inear	

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 313:

											-6			•			
5	5	Mec 1	Glu	Arg	Pro	gzA 5	Trp	Glu	Thr	Ala	Ile 10	Gln	Lys	Pro	Leu	Cys 15	Ser
10		Leu	Pro	Ala	Gly 20	Ser	Gly	Asn	Ala	Leu 25	Ala	Ala	Ser	Leu	Asn 30	His	Tyr
		Ala	Gly	Tyr 35	Xaa	Gln	Val	Thr	Asn 40	Glu	Asp	Leu	Leu	Thr 45	Asn	Càa	Thr
15		Ceu	Leu 50	Leu	Cys	Arg	Arg	Leu 55		Ser	Pro	Mec	Asn 60		Leu	Ser	Leu
		His 65	Thr	Ala	Ser	Gly	Leu 70	Arg	Leu	Phe	Ser	Val 75	Leu	Ser	Leu	Ala	Trp 80
20) .	Gly	Phe	Ile	Ala	Asp 85	Val	qzA	Leu	Glu	Ser 90	Glu	Lys	TYI	Arg	Arg 95	Leu
. 25		GLy	Glu	Mét	Arg 100	Phe	The	Leu	Gly	Thr 105	Phe	Leu	Arg	Leu	Ala 110	Ala	Lau
		Arg	Thr	Tyr 115	Arg	Gly	Arg	Leu	Ala 120	Týt	Leu	Pro	Val	Gly 125	Arg	Val	Gly
30)	Ser	Lys 130	Thr	Pro	Ala	Ser	Pro 135	Val	Val	Val	Gln	Gln 140	Gly	Pro	Val	Asp
		Ala 145	His	Leu	Val	Pro	Leu 150	Gļū	Glu	9ro	Val	Pro 155	Ser	His	Trp	Thr	Val 160
35	5	Val	Pro	Asp	Glu	Asp 165	Phe	Val	Leu	Val	Leu 170	Ala	Leu	Leu	His	Ser 175	His
40)	Leu	Gly	.Ser	Glu 180	Mec	Phe	Ala	Ala	Pro 135		Gly	Arg	ĊΆε	Ala 190	Ala	Gly
		Val	Mec	His 195	Leu	Phe	Tyr	Val	Arg 200	Ala	Gly	Val	Ser	Arg 205	Ala	Met	Leu
45	5	Leu	Arg 210	Leu	Phe	Ļeu	Ala	Met 215	Glu	Lys	GŢĀ	Arg	His 220	Mec :	Glu	Tyr	Glu
		Cys 225	Pro	Tyr	Leu	Val	Tyr 230	Val	bro	`Val	Val	Ala 235	Phe	Arg	Leu	Glu	PT0 240
50)	Lys	Asp	Gly	Lys	Gly 245	Val	Phe	Ala	Vai	Asp 250	Gly	Glu	Leu	Mec	Val 255	Ser
55		Glu	Ala	Val	Gln 260	Gly	Gln	Val	His	Pro 265	Asn	ī'nī	₽he	Txp	Met 270	Val	Seř
	,	Glý	Cys	Val 275	Glu	Pro	Pro	Pró	Ser 280	Trp	ГĀ2	Pro	Gln	Gln 285		Pro	Pro
				_													

(2) INFORMATION FOR SEQ ID NO: 316:

5	(2)	INF	ORMAC	rion	FOR.	SEQ	ID I	NO: 3	314:							
			(i)	(A) L 3) T	ENGT YPE :	H: 6 ami	ERIS 8 am no a lin	ino cid		s				-	
10		٠.	(xi)					PTIO		EQ I	D NO	: 31	4:			
	Met 1	Pro	Leu	Glu	Gly 5	Phe	Càs	Leu	Val	Leu 10	Asp	Ile	Gly	Phe	Leu 15	Leu
15	Val	Mec	Leu	Il e 20	Ser	Leu	Ala	.Ser	Glu 25	Cys	Phe	Thr	Thr	Cys 30	Leu	Asp
20	Ser	Phe	Ser 35	Thr	Thr	Glu	Pro	Gly 40	Cys	Lys	Phe	Tyr	Lys 45	Leu	Leu	His
	Ser	Val 50	Ser	Leu	Ļeu	Asn	Ile 53	Asn	Phe	Asn	Val	Lys 60	Ser	Leu -	Leu	Cys
25	Ser 65	His	Ile	Xaa					•							
								1.	·.,							
30	(2)	INF	ORMAT	CION	FOR	SEQ	ID I	NO: 3	315:		٠.	• .				
			(i)	. (A) L	enct	H: 1	ERIS 05 a	mino		ds			•		
	-			(A) L B) T D) T	engt Ype: Opol	H: l ami CGY:	05 a no a lin	mino cid ear	aci						
			(xi _.))) (SEQ	A) L B) T D) T UENC	ENGT YPE: OPOL E DE:	H: 1 ami OGY: SCRI	05 a no a lin PTIO	mino cid ear N: S	aci	D NO					
	Mec		(xi _.))) (SEQ	A) L B) T D) T UENC	ENGT YPE: OPOL E DE:	H: 1 ami OGY: SCRI	05 a no a lin	mino cid ear N: S	aci	D NO			Leu	Val 15	Phe
35	. 1	Pro	(xi) Leu	((SEQ	A) L B) T D) T UENC: Leu 5	ENGT YPE: OPOL E DE Ser	H: 1 ami CGY: SCRI	05 a no a lin PTIO	mino cid ear N: S: Tyr	EQ II	D NO	Ser	Leu		15	
35 40	Leu	Pro	(xi) Leu Leu	(() () () SEQNO	A) L B) T D) T UENC: Leu 5	ENGT YPE: OPOL E DE: Ser	H: 1 ami OGY: SCRI Gly Pro	05 a no a lin PTIOM	mino cid ear N: S: Tyr Ala 25	aci EQ II Trp 10 Ala	D NO Ile Ile	Ser Pro	Leu Cys	Ala 30	15 Leu	Thr
35	Leu	Pro Ser Val	(xi) Leu Leu Gly 35	Gln Gln 20 Gly	A) L B) T D) T UENC: Leu 5 Pro .	ENGT YPE: OPOL E DE: Ser Phe	W: 1 ami CGY: SCRI Gly Pro Val	05 a no a lin PTION Gln Gln	mino cid ear N: S: Tyr Ala 25 Cys	EQ III Trp 10 Ala	D NO Ile Ile Ile	Ser Pro Leu	Leu Cys Leu 45	Ala 30 Asn	15 Leu Cys	Thr Leu
35	Leu Asp Cys	Pro Ser Val Ile 50 Lys	(xi) Leu Leu Gly 35 Leu	(()) (SEQ) Gln Gln 20 Gly Phe	A) L B) T D) T UENC Leu 5 Pro Ser	ENGT YPE: OPOL E DE: Ser Phe Cys	H: 1 ami CGY: SCRI Gly Pro Val Thr 55	OS a no a lin PTION Gln Gln Ile 40	mino cid ear N: S: Tyr Ala 25 Cys	EQ III Trp 10 Ala His	D NO Ile Ile Ile Leu	Ser Pro Leu Ser 60	Cys Leu 45 His	Ala 30 Asn Val	15 Leu Cys Leu	Thr Leu Leu
35 40 45	Leu Asp Cys	Pro Ser Val Ile 50 Lys	(xi) Leu Leu Gly 35 Leu Met	(()()()()()()()()()()()()()()()()()()(A) L B) T D) T UENC: Leu 5 Pro Ser Thr	ENGTYPE:: OPOLL E DE: Ser Phe Cys Leu Ser 70	H: 1 ami OGY: SCRI Gly Pro Val Thr SS Val	OS a no a lin PTION Gln Gln Ile 40 Ala	mino cid ear N: S Tyr Ala 25 Cys Pro	EQ III Trp 10 Ala His Ser	D NO Ile Ile Leu Pro 75	Ser Pro Leu Ser 60 Gly	Leu Cys Leu 45 His	Ala 30 Asn Val	Leu Cys Leu	Thr Leu Leu Ser 30
35 40 45	Leu Asp Cys Ile 65 Asp	Pro Ser Val Ile 50 Lys	(xi) Leu Leu Gly 35 Leu Met	(((((((((((((((((((A) L B) T D) T UENC Leu S Pro Ser Thr Leu Thr 85 Asn	ENGTYPE: COPOLL EDE Ser Phe Cys Leu Ser 70	H: 1 ami OGY: SCRI Gly Pro Val Thr 55 Val	OS a no a lin PTION Gln Gln Ile 40 Ala Cys	mino cid ear N: S: Tyr Ala 25 Cys Pro Tyr	EQ II Trp 10 Ala His Ser Glu Leu	D NO Ile Ile Leu Pro 75	Ser Pro Leu Ser 60 Gly	Leu Cys Leu 45 His	Ala 30 Asn Val	Leu Cys Leu Leu Cys	Thr Leu Leu Ser 30

5	(i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 71 amino acids (B) TYPE: amino acid (D) TOPOLCGY: linear	
	(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 316:	
10	Mec Trp Gly Cys Ser Gly Leu Gly His Arg Thr Val Ser Phe Leu Leu 1 5 10 15	
	Leu Leu Pro Cys Ser Phe Pro Arg Pro Cys Xaa Leu Phe Gly Leu Ile 20 25 30	
15	Pro Ile Ser Arg Pro Cys Lys Val Glu Ala Pro Arg Leu Ser Val Pro 35 40 45	
	Xaa Leu Ser Cys Ala Ser His Pro Tyr Cys Asn Cys Pro Met Ser Thr 50 55 60	
20	Ser Cys Pro Leu Pro Arg Xaa 65 70	
25 ·	(2) INFORMATION FOR SEQ ID NO: 317:	
30 ((i) SEQUENCE CHARACTEFISTICS: (A) LENGTH: 39 amino acids (B) TYPE: amino acid (D) TOPOLOGY: linear (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 317:	
35	Met Leu Asn Val Leu Ser Lys Val Gln Gln Leu Val Ser Xaa Leu Gly 1 5 10 15	
	Leu Val Thr Phe Leu Leu Asn His Ser Ala Ala Gly Gly Ser Pro Gln 20 25 30	
40	His Arg Trp Leu Leu Kaa 35	
45	(2) INFORMATION FOR SEQ ID NO: 313:	
	(i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 72 amino acids (B) TYPE: amino acid (D) TOPOLOGY: linear	
50	(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 318:	
	Met Lys Ala Ile Ala Arg Ala Cys Leu Leu Leu Ser Leu Leu Val Leu 1 5 10 15	
55	Pro His Val Val Ser Glu His Leu Phe Trp His His Asn Pro Arg His 20 25 30	
60	Pro Val Ile Trp Pro Phe Pro Pro Phe His Leu Ile Ser Cys Ser Val 15 40 45	-

	Ser	Ala 50	Ser	Thr	T∓p	His	Leu 55	Gly	Glu	Хаа	Leu	Leu 60	Lau	Leu	Val	Pro
5	Ile 65	Ala	Pro	Ser	Val	T≍p 70	Ser	Хаа								
10	(2)							NO: 3								
15				(. (:	A) L B) T D) T	ENGT: YPE: OPOL	H: 6 ami CGY:	ERIST 2 am no at lin	ino cid ear	acid		77.	2	-		
13	Met 1							Arg Arg					-	Pro	Gly 15	Leu
20	Leu	His	Asn	Thr 20	Tyr	Leu	Ala	.Arg	Pro 25	Gly	Asp	Phe	Pro	Ala 30	Gln	Gly
25	Thr	Thr	Glu 35	Asn	Thr	Glu	Cys	Gln 40	GĮĄ	Ser	Pro	Ser	Pro 45	Ile	Ser	His
	Leu	Gl∑ 50	Lys	Val	Arg	Ser	Leu 55	Asp	Ser	Asn	Thr	Gln 60	Ile	Xaa		
30	(2)	INFO	OPMAT	rion	FOR	SEQ	ID 1	vo: 3	320:	٠						
35				. (A) L B) T D) T	engt YPE : opol	H: 2 ami CGY:	ERIS 86 a no a lin PTIC	mino cid ear	aci		: 32	0:			
40	Mec 1	Pro	Leu ,	Leu	Phe 5	Phe	Ser	Val	Ser	Th:: 10	Leu	Phe	Sér	Gly	Ser 15	Val
	Thr	Leu	Gln	Gln 20	Arg	Gly	Mec	Phe	Leu 25			Thr		Thr 30	Gly	Glu
45	Gln	Val	Leu 35	Ala	Leu	Leu	Tip	Pro 40	Arg	Phe	Glu	Leu	Il≘ 45	Leu	Glu	Mec
50	Asn	Val 50	Gln	Ser	Val	Arg	Ser 55	Thr	qzA	Pro	Gln	60 Arg	Leu	Gly	Gly	Leu
	Asp 63	Thr	Arg	Pro	His	Тут 70	Ile	Thr	Arg	Arg	Ту г 75	Ala	Glu	Phe	Ser	Ser 80
55	Ala	Leu	Val	Ser	Ile 85		Gln	Thr	Ile	90 510	Asn	Glu	Arg	Thr	Met 95	Gln
60	Leu	Leu	Gly	Gln 100	Leu	Gln	Val	Glu	Val 105	Glu	Asn	Phe	Val	Leu 110	Arg	Val
60	Ala	Ala	Glu	Phe	Ser	Ser	Arσ	LVS	Glu	Gln	Leu	Val	Phe	Leu	Ila	Asn

Ala Ala Glu Phe Ser Ser Arg Lys Glu Gln Leu Val Phe Leu Ile Asn

•		115					120		٠.			125			
5	Asn Tyr		Met	Mec	Leu	Gly 135	Val	Leu	Mec	Glu	Arg 140	Ala	Ala	Asp	Asp
J	Ser Lys 145	: Glu	Val	Glu	Ser 150	Phe	Gln	Gln	Leu	Leu 155	Asn	Ala	Arg	Thr	Gln 160
1.0	Glu Phe	e Ile	Glu.	.Glu 165	Leu	Leu	Ser	Pro	Pro 170	Phe	Gly	Gly	Leu	Val 175	Ala
	Phe Val	L Lys	Glu 130	Ala	Glu	Ala	Leu	Ile .135	Glu	Arg	Gly	Gla	Ala 190	Glu	Arg
15	Leu Arg	g Gly 195	Glu	Glu	Ala	Arg	Val 200	The	Gln	Leu	Ile	Arg 205	Gly	Phe	Gly
20	Ser Ser 210		Lys	Ser	Ser	Val 215	Glu	Ser	Leu	Ser	Gln 220	Asp	Vál	Mec	Arg
	Ser Pho 225	e Thr	Asn	Phe	Arg 230	Asn	Gly	Thr	Ser	Ile 235	Ile	Gln	Gly	Ala	Leu 240
25	Thr Gl	n Leu	Ile	Gln 245	Leu	īyī	His	Arg	Phe 250	His	Arg	Val	Leu	Ser 255	
	Pro Gl	n Leu	Arg 260	Ala	Leu	Pro	Ala	Arg 265		Glu	Leu	Ile	Asn 270		His
30℃	His Le	u Met 275		Glu	Leu	Ĺys	Lys 230		Lys	Pro	Asn	Phe 235	Xaa		
35	(2) IN	FORMA	TION	FOR	SEQ	ID	NC :	321:							
40	·		((A) I (B) T (D) T	.eng1 Type: Topoi	TH: S : ami LCGY:	is an ino a : lir	mino acid mear	acid		D: 33	.1:			
45	Met Ph	e Arg	; Ala	. Leu 5		Asp	Leu	Leu	Thr 10		Tyr	Pro	Gln	Gln 15	
	Leu Le	eu Gla	1 Val 20		. Val	. Val	. Mec	тут 25		Val	. Leu	`Gln	Val 30		Glu
50	Leu Pr	:0 Tr 3:		Glu	. Leu	ı Ile	His 40		ı Glr	Gly	r Ile	Val		Thr	: Asp
	Gln L		s Leu	ı Lys	Glr	n Xaa 53								•	
55	(2) I	v opm	ATION	I FOE	R SEC	Q ID	NO:	322	:						

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 59 amino acids

	-			(2) T	YPE:	ami	.no a	cid							
	(D) TOPOLCGY: linear (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 322:															
5	Asp 1	Phe	Val	Pro	Val 5	Leu	Val	Phe	Val	Lau 10	Ile	ŗā	Ala	Asn	Pro 15	Pro
10	Cys	Leu	Leu	Ser 20	Thr	Val	Gln	Tyr	Ile 25	Ser	Ser	Phe	Тут	Ala 30	Ser	Cys
. •	Leu	Sėr	Gly 35	Glu	Glu	Ser	Tyr	TEP 40	Ţzp	Mec	Gln	Phe	Thr 45	Ala	Ala	Val
15	Glu	Phe 50	Ile	Lys	Thr	Ile	qeA 55	Asp	Arg	Lys	Kaa			•		
												1				
20	(2)	INF	ORMAC	rion	FOR	SEQ	ID I	NO: I	323:							٠,
			(i)	(A) L	ENGT	H: 1	ERIS' 20 a no a	mino		ds .					
25			(xi)					lin PTIO		EQ II	ON C	: 32	3:			
	Met 1	His	Pro	Ala	Arg 5	Lys	Leu	Leu		Leu 10	Leu	Phe	Leu	Ile	Leu 15	Mec
30	Glý	Thr	Glu	Leu 20	Thr	Gln	Asp	Ser	Ala 25	Ala	Pro	Asp	Ser	Leu 30	Leu	Arg
35	Ser	Ser	Lys - 35	Gly	Ser	Thr	Arg	Gly 40	Ser	Leu	Ala -	Ala	Ile 45	Val	Ile	Trp
	Arg	Gly 50	Lys	Ser	Glu	Ser	Arg 55	Ile	Ala	Lys	Thr	Pro 60	Gly	Ile	Phe	Arg
0	Gly 65	Gly	Glγ	Thr	Leu	VaI 70	Leu	Pro	Pro	Thr	His 75	Thr	Pro	Glu	Trp	Leu 80
	Ile	Leu	Pro	Leu	Gly 85	Ile	The	Leu	Pro		Gly				Th <u>r</u> 95	Gly
15	Gly	Gly	Ąsp	Суs 100	Ala	Ala	Glu	Thr	Trp/ 105	Lys	Gly	Ser	Gln	Arg 110		Gly
50	Gln		Cys 115	Ala	Leu	Leu	Ala	Xaa 120							-	
55	(2)			SEQUI	ENCE	CHA	RACT	NO: 3 ERIST	rics		_					
					3) T		ami	4 am no a		acla	5					

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 324:

Phe Phe Leu Val Val Phe Ser Leu Ser Phe Xaa Pro Ser Val Leu Thr

	1				5					10					15		
5	Ser	Pro	Val	His 20	Kaa	Pro	His	Cys	Cys 25	Gln	Xaa	Asp	Kaa	Ile 30	Leu	Phe	
	Lys	Asn	Thr 35	Leu	Хаа	Kaa	Phe	Каа 40	Ala	Lys	Tyr	Каа					
10			-														
	(2)	INF	CAMPC	MOIT	FOR	SEQ	ID 1	NO: 3	325 :			,					
15	~			(ENCE A) L B) T D) T UENC	engt YPE : OPOL	H: 5 ami CGY:	9 am no a lin	ino cid ear	acid		: 32	5:				
20	Mec l	Phe	Sér	Arg	Thr S	Ser	Asn	Phe	Ižb	Thr 10	Phe	Phe	Phe	Gln	Phe 15	Leu	
25	Ile	Phe	Ĺýs	Val 20	Phe	Leu	Val	Leu	Lys 25	Asn	Xaa	Phe	Thr	Ser 30	Gln	Lys	
	Ile	Хаа	Хаа 35	Ile	Kaa	Xaa	Glu	Lys 40	Pro	Lys	Lys	Lys	Lys 45	Kaa	Arg	Gly	
30	Gly	Arg 50	Ala	Pro	Ser	Pro	Gln 55	Gly	Gly	Pro	Хаа		•	J			
35	(2)	INF			FOR												
40				(ENCE A) L B) T D) T UENC	ENGT YPE : YPOL	H: l ami CGY:	no a no a lin	uino cid ear	acid	•	. 32	6:				
	Met 1	Gly	Leu	Leu	Ile 5	Phe	Mec	Leu	Leu	Ile 10	Gly	Ile	His	Ser	Gln 15	Cys	
45	Ser	Kaa									•						
50	(2)	INF	ORMA	TION	FOR	SEO		NO :	327:						,	٠,	
				•	ENCE					:			٠				
5 5 .		·			(A) I (B) 1 (D) 1	LENGI TYPE : TOPOI	H: 8 ami CGY:	17 an Ino a Lir	nino Acid Near	acid): 32	:7:				
60	Mec 1		Leu	. Phe	Cys S		Val	Leu	. Phe	Cys 10		Val	Phe	Glu	Мес 15	Asp,	

	Ser	· Ser	· Ser	Val 20		Gln	Ala	Gly	Val 25		Trp	Cys	A.sp	Leu 30		Ser
5	Lau	Gln	Ala 35		Bzo	510	Gly	Phe 40		Pro	Phe	Ser	Cys 45	Leu	Ser	Lev
•	Pro	Ser 50	Ser	_Trb	qzA.	Tyr	Arg 55	Arg	5ro	Pro	Pro	Arg 60		Ala	Asn	Phe
10	Leu 65		?he	Leu	Val	Glu 70	Thr	Gly	Phé	His	His 75	Val	Ser	Gln	Asp	Gl _y
15	Leu	. Asp	Leu	Leu	Thr 85	Ser	Kaa	· ·								•
	(2)	INF	ORMA	TION	FOR	SEQ	ID I	NO :	328 :							,
20				(A) L B) T D) T	ENGT YPE : OPOL	H: 5 ami CGY:	38 a no a lin	mino cid ear	aci		: 32	8 :			
	Met 1		Thr	Lys	Eys S	Leu	Cys	Ile-	Val	Gly 10	Gly	Ile	Leu	Leu	Val 15	Phe
30	Gln	Ile	Ile	Ala 20	Phe	Leu	Val	Gly	Gly 25	Leu	Ile	Ala	Pro	Gly 30	Pro	Thr
	Thr	Ala	Val 35	Ser	Tyr	Mec	Ser	Val 40		Cys	Val	Asp	Ala 45	Arg	Lys	Asn
35	His	His 50	Lÿs	Thr	Lys	Trp	Phe 55	Val	Pro	Trp	Gly	60 80	Asn	His	Cys	Asp
40	Lys 65	Ile	Arg	ązA	Ile	Glu 70	Glu	Ala	Ile	Pro	Arg 75	Glu	Ile	Glü	Ala	Asn 80
	Asp	Ile	Val	Phe	Ser 85	Val	His	Ile	Pro	Leu 90	PTO	His	Mec	Glu	Мес 95	Ser
45	Pro	Trp	Phe	Gln 100	Phe	Mec	Leu	Phe	Ile 105	Leu	Gln	Leu _.	Asp	Ile 110	Ala	Phe
	Lys	Leu	Asn 115	Asn	Glń	Ile	Arg	Glu 120	Asn	Ala	Glu	Val	Ser 125	Mec	qzA	Val
50	Ser	Leu 130	Ala	Tyr	Arg	Asp	Asp 135	Ala	Phe	Ala	Glu	T=p^ 140	Thr	Glu	Mec	Ala
55	His 145	Glu	Arg	Val	Pro	Arg 150	ŗňz	Leu	Lys	Cys	Thr 155	Phe	Thr	Ser	Pro	Lys 160
	The	Pro	Glu	His	Glu 165	Gly	Arg	Tyr	TYT.	Glu 170	Civs	qzA	Val	Leu	9ro 175	Phe
60	Mec	Glu	Ile	Gly 130	Ser	Val	Ala	His	Lys 135	Phe	Tyt	Leu	Leu	Asn 190	Ile	 Arg

	Leu	Pro	Val 195	Asn	Glu	ŗλa	Lys	Lys 200	Ile	Asn	Val	Gly	Ile 205	Gly	Glu	Ile
5	Lys	Asp 210	Ile	Arg	Leu	Val	Gly 215	Ile	His	Gln	Asn	Gly 220	Gly	Phe	Thr	Lys
10	Val 225	Trp	₽he	Ala	Mec	Lys 230	Thr	Phe	Leu	Thr	Pro 235	Ser	Ile	Phe	Ile	Ila 240.
٠.	Mec	Val	Tzp	Tyt	Trp 245	Arg	Arg	Ile	Thr	Мес 250	Mec	Ser	Arg	bro	Pro 255	Val
15	Lau	Leu	Glu	Lys 260	val.	Ile	Phe	Ala :	Leu 265,	_	Ile	2 c 1	Met	Tite 270	Pile	Ile
	Asn	Ile	Pro 275	Val	Glu	Trp	Phe	Ser 280	Ile	Gly	Phe	Asp	Trp 285	Thr	Trp	Mec
20	Leu	Leu 290	Phe	Gly	Asp	Ile	Arg 295	Gln	Gly	Ile	Phe	Tyr 300	Ala	Mec	Leu	Leu
25.	Ser 305	Phe	Trp	Ile	Ile	Phe 310	Cys	Gly	Glu	His	Mec 315	Mec	Asp	Gln	His	Glu 320
	Arg	Asn	His	Ile	Ala 325	Gly	Tyr	Tip	Lys	Gln 330	Val	Gly	Pro	Ile	Ala 335	Val
30	Gly	Ser	Phe	Cys 340	Leu	Phe	Ile	Phe	Asp 345		Cys	Glu	Arg	Gly 350	Val	Gln
	Leu	Thr	Asn 355	Pro	Phe	īùī	Ser	Ile 360	Trp	Thr	Thr	Asp	Ile 365	Gly.	Thr	Glu
35	Leu	Ala 370	Mec	Ala	Phe	Ile	Ile 375	Val	Ala	Gly	Ila	Cys 380	Leu	Cys	Leu	Tyr
40	Phe 385	Leu	Phe	Leu	Càz	Phe 390	Mec	Va:1	Phe	Gľn	Val 395	Phe	Arg	Asn	Ile	Ser 400
	Gly	Lys	Gln	Ser	Ser 405		Pro	Ala	Met	Ser 410	Ļys	Val	Arg	Arg	Leu 415	His
45	īyī	Glu	Gly	Leu 420	Ile	Phe	Arg	Phe	Lys 425	Phe	Leu	Mec	Leu	Ile 430	Thr	Leu
	Ala	Cys	Ala 435	Ala	Mec	Thr	Val	Il⇒ 440	Phe	Phe	Ile	Val	Ser 445	Gln	<u>Val</u>	Thr
50		Gly 450	His	Trp	.Lys	Trp	Gly 455	Gly	Val	Thr	Val	Gln 460	Val	Asn	Ser	Ala
<u>5</u> 5	Phe 465	Phe	Thr	Gly	Ile	Ty: 470	Gly	Met	Trp	Asn	Leu 475	Tyr	Val	Phe	Ala	Leu 480
•	Mec	Phe	Leu	Tyr	Ala 485	Pro	Ser	His	Lys	Asn 490	Tyr	Gly	Glu	ģEA,	Gln 495	Ser
60	Asn	Gly	Mec	Gln 500	Leu	Pro	Cys	ŗàz	Ser 505	Arg	Glu	Asp	Càz	Ala 510	Leu	Phe

•	Va <u>l</u>	. Ser	Glu 515	l Leu	Tyr	Gla	Glu	1 Leu 520	. Phe	: Ser	: Ala	. Se:	525		: Ser	: Phe
5	Ile	Asr 530	ı Asp	Asn	Ala	Ala	. Ser 535		. Ile	: Kaa				-		
10	(2)	INF	ORMA	TION	FOR	. SEQ	ID	NO :	329:							
15		•			(A) <u>[</u> (B) 1 (D) 1	LENGI LYPE : LOPOI	TH: 2 ami	202 a ino a : lir	mino cid lear	aci): 32	:9:	•.		
20	Mec 1	Gly	Ile	Ala	Leu 5	Ala	Val	Leu	Gly	Trp 10	Leu	Ala	Val	Met	Leu 15	
	CÀ2	Ala	Lau	Pro 20	Mec	Trp	Arg	Val	Thr 25		Phe	Ile	Gly	Ser 30	Asn	Ile
25	Val	Thr	Ser 35	Gln	Thr	Ile	Trp	Glu 40	Gly	Leu -	Tŗp	Mec	Asn 45	Cys	Val	Val
	Gln	Ser 50	Thr	Gly	Gln	Met	Gln 55	Cys	Lys	Val	Tyr	Asp 60	Ser	Leu	Léu	Ala
30	Leu 65	Pro	Gln	Asp	Leu	Gln 70	Alạ	Ala	Arg	Ala	Leu . 75	Val	Ile	Ile	Ser	Ile 80
35	Ile	Val	Ala	Ala	Lau 85	Gly	Val	Leu	Leu	Ser 90	Val	Val	Gly	Gly	Lys 95	Cys
	Thr	Asn	Cys	Leu 100	Glu	Asp	Glu	Ser	Ala 105	Ļys	Ala	Lys	Thr	Mec 110	Ile	Val
40	Ala	Gly	Val 115	Val	Phe	Leu	Leu	Ala 120	Gly	Leu	Mec	Val	Ile 125	Val	Pro	Val
•	Ser	Trp 130	Thr	Ala	His	Asn	Ile 135	Ile	Gln	Asp	Р́ће	Tyr 140	Asn	Pro	Leu	Val-
45	Ala 145	Ser	Gly	Gln	Lys	Arg 150	Glu	Mec	Gly	Ala	Ser 155	Leu	Tyr	Val	Gly	Trp 150
50	Ala	Ala	Ser	Gly	Leu 165	Leu	Leu	Leu 	Gly	Gly 170		Leu	Leu	Cys ·	Cys 175	Asn

Cys Pro Pro Arg Thr Asp Lys Pro Tyr Ser Ala Lys Tyr Ser Ala Ala 180 135 190

(2) INFORMATION FOR SEQ ID NO: 330:

Arg Ser Ala Ala Ala Ser Asn Tyr Val Xaa 195 200

50

(2) INFORMATION FOR SEQ ID NO: 331:

			(<u>i</u>)	(A) L	ENGT	H: 2	ERIS 63 a no a	mino	aci	ds					
5	.*		(xi)					lin PTIO		EQ I	D NO	: 33	0 :			
	Mec 1	Ala	Thr	Val	Thr 5	Ala	Thr	Thr	Lys	Val 10	Pro	Glu	Ile	Arg	даў. 13	Val
10	Thr	Arg	Iļe	Glu 20	Yīđ	Ile	Gly	Alæ	His 25	Ser	His	Ile	Ārg	Gly 30		Gly
.15	Lau	qaA	Asp 35	Ala	Leu	Glu	Pro	Arg 40	Gln	Ala	Ser	Gln	Gly 45	Mec	Val	Gly
	Gln	Leu 50	Ala	Ala	Arg	Arg	Ala 55	`Ala	Gly	Val	Val	Leu 60	Glu	Mec	Ila	Arg
20	Glu 65	Gly	Lys	Ile	Ala	Gly 70	Arg	Ala	Val	Leu	Ila 75	Ala	Gly	Gln	510	Gly 80
	Thr	Gly	Lys	Thr	Ala 85	Ile	Ala	Met	Gly	Met 90	Ala	Gln	Ala	Leu	GLy 95	520
25 -	Asp	Thr	Pro	Phe 100	Thr	Ala	Ile	Ala	ios ios	Ser	Glu	Ile	Phe	Ser 110	Leu	Glu
30	Mec	Ser	Lys 115	Thr	Glu	Ala	Leu	Th= 120	Gln	Ala	Phe	Arg	Arg 125	Ser	Ile	Gly
	Val	Arg 130	Ile	Lys	Glu	Glu	Thr 135	Glu	Ile	Ile	Glu	Gly 140	Glu	Val	Val	Glu
35	Ila 145	Gln	Ile	Asp	Arg	Pro 150	Ala	Thr	Gly	Thr	Gly 155	Ser	Lys	Val	Gly	Lys 160
	Leu	Thr	Leu	ГÀг	Thr 165	Thr	Glu	Met	Glu	Thr. 170	Ile	Tyr	qzA	Leu	Gly 175	Thr
40	Lys	Mec	Ile	Xaa 130	Ser	Leu	Thr	Lys	Asp 185	Lys	Val	Gla	Ala	Gly 190	Asp	Val
45	Ile	Thr	Ile 195		Lys	Ala		Gly 200		Ile	•		Leu 205	Gly	Arg	Ser
	Phe	Thr 210	Arg	Ala	Arg	Glu	Leu 215	Arg	Arg	Tyr	Gly	Leu 220	Pro	Asp	Gln	Val
50	Arg 225	Ala	Val	Pro	Arg	Tro 230	Gly	Ala	Pro.	Glu	Thr 235	Gln	Gly	Gly	Gly	Ala 240
	His	Arg	Val	Pro	Ala 245	Arg	ązA	Arg	Arg	His 250	Gln	Leu	Ser	His	Pro 255	Gĺy
53	Lau	Pro	Gly	Ala 260	.Leu	Leu	Arg									

5					(B) 1	CYPE:	am:	250 a Lno a : lir	acid	o ac	ids					
•			(x <u>i</u>)					PTIC		SEQ I	D NC): 33	1:			
10	Met	Leu	Ala	. Leu	Leu S		Leu	Ser	Gla	Ala 10		Asn	. Ile	: Leu	Leu 15	
	Leu	Lys	Gly	Leu 20		Pro	Ala	Glu	Ile 25		Ala	Val	CÀR	Glu 30	Lys	Gl
15	. Asn	. Phe	Asn 35		Ala	His ?	Gly	Leu 40		Trp	Ser	Tyr	Тут 45	Ile	Gly	ŢŢ
	Leu	50 Arg	Fen	. Ile	Leu	510	Glu 55	- Leu	Gln	Ala	Arg	Ile 60	Arg	Thr	Tyr	As
20	Gln 65	His	Tyr	Asn	Asn	Leu 70	Leu	Arg	Gly	Ala	Val 75	Ser	Gln	Arg	Leu	Ty:
25	Ile	Leu	Leu	Pro	Leu 85	Asp	Cys	Gly	Val	90	yzb	Asn	Leu	Ser	Mét 95	Ala
	Asp	bro	Asn	Ile 100	Arg	Phe	Leu	qzA	Lys 105	Ļeu	220	Gln	Gln	Thr 110	Gly	Asp
30	Arg	Ala	Gly 115	Ile	Lys	Asp	Arg	Val 120	Tyr	Ser	Asn	Ser	Ile 125	Tyr	Glu	Lev
	Leu	Glu 130	Asn	Gly	Gln	Arg	Ala 135	Gly	Thr	Cys	Val	Leu 140	Glu	Tyr	Ala	Thr
35	Pro 145	Leu	Gln	Thr	Leu	Phe 150	Ala	Met	Ser	Gln	Тут 155	Ser	Gln	Ala	Gly	Phe 160
40	Ser	Glγ	Glu	Asp	Arg 165	Leu	Gľu	Gln	Ala	Lys 170	Leu	Phe	Cys	Arg	Thr 175	Leu
	Glu	Asp	Ile	Leu 130	Ala	Asp	Ala	Pro	Glu 185	Ser	Gln	Asn	Asn	Cys 190	Arg	Leu
45	Ile	Ala	Tyr 195	Gln	Glu	Pro	Ala	Asp 200	Asp	Ser	Ser	Phe	Ser 205	Leu	Ser	Gln
	Glu	Val 210	Leu	Arg	His	Leu -	Arg 215	Gln	Glu	Glu	Lys	Glu 220	Glu	Val	Thr	Val
50	Gly 225	Ser	Leu	Lys	Thr	Ser 230	Ala	Val	Pro	Ser	Thr 235	Ser	Thr	Mec	Ser	Gln 240
55	Glu	520	Glu	Leu	Leu 245	Ile	Ser	Gly	Mec	Glu 250	Lys	520	Leu	Pro	Leu 255	Arg
	Thr	qzA	Phe	Ser 260	٠.							•				

(i) SEQUENCE CHARACTERISTICS:

	(2)	INFO	ORMA:	rion	FOR	SEQ	ID 0	NO: 3	332:							
ĵ.				(A) L B) T D) T	engt Yfe: Opol	H: 4 ami CGY:	8 am no a lin	ino . cid ear	acid		: 33:	2:			
10	Mec 1	Thr	Pro	Gln	∟уз 5	920	Ala	Lau	Ala	Val 10	Leu	Leu	Leu	Glu	Val 15	Pro
	Leu	Leu	Leu	Th:; 20	Leu	Ser	Val	Leu	Lys 25	Lys	Arg	Cys	Leu	Val 30	Thr	Cys
15	Glu	Pro	Thr 35	Ser	Arg	Phe	Val	Ser 40	Cys,	Asp ~	Leu	, Sro	Leu 45	Ser	Val	Хаа
20		٠						•	,				-	-		
										٠						
	(2)	INFO	ORMA	rion	FOR	SEQ	ID N	vo: 3	333:	-					-	
25 .			(i)	SEQUI .)				ERIST			ਰੇਡ					
. •								no a lin				• •				
30				SEQ										•		
	Met 1	Ala	Ala	Ala	Ala 5	Trp	Leu	Gln -	Val	Leu 10	SLO	Val	Ile	Leu	Leu 15	Leu
35	Leu	Gly	Ala	His 20	520	Ser	Pro	Leu	Ser 25	Phe	Phe	Ser	Ala	Gl ₂ 30	Pro	Ala'
	Thr	Val	Ala 35	Ala	Ala	Asp	Arg _.	Ser 40	Lys	Trp	His	Ile	Pro 45	Ile	Pro	Ser
40	Gly	Lys 50	Asn	Tyr	Phe	Ser	Phe 55	Gly	Lys	Ile	Leu	Phe 60	Arg	Asn	Thr	Thr
45	Ile 65	Phe	Leu	Lys	Phe	Asp 70	Gly	Glu	Pro	Cys	Asp 75	Leu	Ser	Leu	Àsn	Ile 80
	Thr	dri	Tyr	Leu	Lys 85	Ser	Ala	Asp	Cňz	Tyr 90	Asn	Glu	Ile	Tyr	Asn 95	Phe
50	Lys	Ala	Glu	Glu 100	Val	Glu	Leu	Tyt	Leu 105	Glu	Lys	Leu	Lys	Glu 110	Lys	Arg
·	Gly	Leu	Ser 115	Gly	Lys	Tyr	Gln	Thr 120	Ser	Ser	Lys	Leu	Phe 125	Gln	Asn	Cys
55	Ser	Glu 130	Leu	Phe	Lys	Thr	Gln 135	The	Phe	Ser	Gly	Asp 140	Phe	Mec	His	Arg
60	Leu 145	Pro	Leu	Leu	Gly	Glu 150	Lys	Gln	Glu	Ala	Lys 155	Glų	Asn	Gly	Thr	Asn. 150

						•.										
	Leu	Thr	Phe	Ile	Gly 165	Asp	ŗàs	Thr	Ala	Мес 170	His	Glu	Pro	Leu	Gln 175	Thr
5	Trp	Gln	Asp	Ala 130	Pro	Tyr	Ile	Phe	Ila 185	Val	His	Ile	Gly	Ila 190	Ser	Ser
	Ser	Lys	Glu 195	Ser	Ser	Lys	Glu	Asn 200	Ser	Leu	Ser	Asn	Leu 205	Phe	Thr	Mec
10	Thr	Val 210	Glu	Val	Lys	Gly	Pro 215	Tyr	Glu	Tyr	Ĺau	Thr 220	Leu	Glu	ĄsĄ	Tyr
15	Pro 225	Leu	Mec	Ile	Phe	Phe 230	Met	Val	Mec	CĀ2	Ile 235	Val	Tyr	Val	Leu	Phe 240
13	Gly	Val	Leu	drī	Leu- 245	Ala	Trp	Ser	Ala	Cys 250	Tyr	Trp	Arg	qeA	-Leu 255	Leu
20	Arg	Ila	Gln	Phe 260	Ţij	Ila	Ġly		.Val 265	Ile	2he	Leu	Gly	Мес 270	Leu	Glu
	Lys	Ala	Val 275	Phe	Tyr	Ala	Glu	Phe 230	Gln	Asn	Ile	Arg	Tyr 235	Lys	Gly	Kaa
25	Ser	Val 290		Gly	Ala	Leu	Ile 295	Leu	Ala	Glu	Lau	Leu 300	Ser	Ala	Val	Lys
30	Arg 305		Leu	Ala	Arg	Thr 310	Leu	Val	Ile		Val 315	Ser	Leu	Gly	ī'n	Gly 320
50	īle	Val	Lys	Pro	· Arg 325	Leu	Glu	Ser	Leu	Phe 330	Ile	Arg	Leu	Xaa		
35	(2)		0714	,				NO -	224.				. 0.		7	
	(2)	TML						NO:			•					
40			(1)		(A) (E) T	ENGT	TH: 2	TERIS 200 a ino a : -lir	emino acid		ds					
			(xi)					PTIC		EQ I	D NO): 33	4:		-	
45	Mec 1		. Leu	. Хаа	Val		Thr	: Leu	Gly	Leu 10		. Leu	. Phe	Thr	Leu 15	Cys
	Gly	Lys	: Phe	Lys 20		Trg) Lys	. Leu	Asn 25		Ala	. Phe	Leu	Leu 30	·Ile	Thi
50	Ala	. Phe	e Leu 39		Val	. Leu	. Il∈	TIF 40		. Ala	Tr	Met	: Thr 45		Tyr	Le
55	Phe	Gly 50		Val	. Lys	: Lev	Glr 55		ı Gly	' Asp	Ala	Try 60		. Asş	Pro	Thu
,,	Leu 65		a Ile	thi	r Leu	Ala 70		ı Ser	r. Ala	Gly	r Ser 79	_	: Ser	Ser	Ser	udT 98
60	Pro	Ser	r Leu	ı Arg	Ser 89		- Ala	a Pro	Phe	e Cys 90		n Pro	Cys	Arg	r Arg 95	

•	Arg	Pro	Thr	Thr 100	Ser	Thr	Arg	Arg	Ser 105	Pro	Gly	Cys	Gly	Arg 110	Arg	Pro
5	Ser	Arg	Arg 115	Thr	Cys	Ser	Cys	Arg 120	Gly	Pro	Ile	TIP	Arg 125	Thr	Arg	Pro
10	Ser	Pro 130	Trp	Met	Asn	Thr	Мес 135	Gln	Leu	Ser	Glu	Gln 140	Gln	Asp	Phe	Pro
	Thr 145	Ala	Ala	Trṗ	Glu	Lys 130	Asp	Pro	Val	Ala	Ala 155	Tŕp	Gly	Lys	Ąsp	Pro 160
15	Aļa	Leu	Arg	Leu	Glu 165	Ala	The	Cys	Ile	Ser 170	Gln	Leu	Arg	Trp	Pro 175	Ser
	Cys	Ser	Thr	Val 130	Gly	Pro	Ser	Gln	Leu 135	Leu	Àrg	Gln	Val	Thr 190	Gln	Glu
20	Хаа	Thr	Phe 195	GŢĀ	Glu	Arg	Leu	Xaa 200								
					•									· • •		
25	(2)	INF	ORMA	rion	FOR	SEQ	ID I	NO: 3	35 :							
			(i)	(ENCE A) L B) T	engt	H: 2	4 am	ino .		s					
30			(xi)	(D) T UENC	OPOL	OGY:	lin	ear	EQ I	D.NO	: 33	5 :			
	Met 1	Leu	Leu	His	His 5		Leu	Leu	Ile		Thr		His	Leu	Val 15	Leu
35	Leu	Leu	Ala	Thr 20	Leu	Leu	Val	Xaa								
40					•											
70	(2)	IMF	ORMA	rion	FOR	SEQ	י פו	.: OW	336:							•
45			(<u>i</u>)	~ ~ (ENCE (A) L (B) T	ENGT	H: 1	.43 a .no a	mino cid		.ds					
			(xi)	SEQ	UENC	E DE	SCRI	PTIO	N: S	EQ I	D NO	: 33	6:			
50	Mec 1		Ļys	Ala	Leu 5		Ile	Tyr	Leu	Val	Ser	Ser	Phe	Leu	Ala 15	Leu
· .	Asn	Gln	Ala	Ser 20		Ila	Ser	Arg	Cys 25	Ąsp	Leu	·Ala	Gln	. Val 30		Gln
55	Leu	Glu	qeA :	Leu	Asp	Gly	Phe		Gly	Tyr	Ser	Leu	Ser	Asp	Tip	Leu
			35					40					45			

	Asn 65	Ala	Asp	Gly	Ser	Phe 70	Asp	Tyr	Gly	Leu	Phe 75	Gln	Iľa	Asn	Ser	His 80
5	Tyr	Trp	Cys	Asn	Хаа 85	Tyr	Lys	Ser	Tyr	Sar 90	Glu	Asn	Leu	Cys	His 95	Val
	qzA	Cis	Gln	Asp 100	Leu	Leu	Asn	Pro	Asn 105	Leu	Leu	Ala	Gly	Ile 110	His	Cys
10	Ala	Lys	Arg 115	Ile	Val	Ser	Gly	Ala 120	Arg	Gly	Mec	Asn	Asn 125	dzī	Val	Arg
15	Mec	Glu 130	Хаа	Cys	Thr	Val	Gln 135	Ala ·	Gly	His	Ser	Sar 140	Thr	Gly	Kaa	
20	(2)	INF	ORMAI	NOI	FOR	SZQ	ID N	10: 3	337:				-			
20			.(i)	(A) L B) T	engt YPE :	H: 9 ami	5 am no a	ino . cid		s					
25			(xi)				CGY: SCRI			EQ I	ои с	: 33	7:			
	Mec 1	Leu	Val	Ile	Ala 5	Gly	Gly	Ile	Le'n	Ala 10		Leu	Leu	Leu	Leu 15	Ile
30	Val	Val	Val	Leu 20	Cys	Leu	Tyr	Phe	Lys 25		His	Asn `	Ala	Leu 30	Lys	Ala
	Ala	Lys	Glu 35	Pro	Glu	Ala [,]	Val	Ala 40	Val	Lys	Asn	His	Asn 45	Pro	qzA	Lys
35	. Val	Trp 50	Trp	Ala	Lys	Asn	Ser 55	Gln	Ala	Lys	Thr	Ile 60	Ala	Thr	Glu	Ser
40	Cys 65	Pro	Ala	Leu	Gln	Cys 70	Cys	Glu	Gly	Tyr	Arg 75	Mec	Cys	Ala	Ser	Phe 80
	Asp	Ser	Leu	Pro	Pro 85	Cys	Суѕ	Cys	Asp	Ila 90	Asn	Glu	Gly	Leu	Xaa 95	
45	(2)	TATE	ORMA	PTON	EOB.	SEO	TD I	VIO • 1	778.					•		
-	(2)	2212		SEQU	ENCE	CHA	RACT H: 3	ERIS	TICS		s					
50			(xi)	. (T, (C	OPOL	ami :CGY: SCRI	lin	ear	EQ I	D NO	: 33	8:			
55	Mec 1	Leu	Leu	Ľys	Ser 5	Asn	Ile	Leu	Mec	Leu 10	Asn	Leu	Phe	Ala	Ala 15	Asn
	Val	GŢĀ	Ala	Asn 20	Phe	Ala	Гéп	Thr	Val 25	Glu	Lys	Ile	Gly	Мес 30	Ile	Leu
60			**= 3	G	6 3.	76										

5	(2) INFORMATION FOR SEQ ID NO: 339:
10	(i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 39 amino acids (B) TYPE: amino acid (D) TOPOLOGY: linear (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 339:
15	Met Leu Val Val Ala Phe Gly Leu Leu Val Leu Tyr Ile Leu Leu Ala 1 5 10 15 Ser Ser Trp Lys Arg Pro Glu Pro Gly Ile Leu Thr Asp Arg Gln Pro
20	20 25 30 Leu Leu His Asp Gly Glu Xaa 35
25	(2) INFORMATION FOR SEQ ID NO: 340: (i) SEQUENCE CHARACTERISTICS:
30	(A) LENGTH: 71 amino acids (B) TYPE: amino acid (D) TOPOLOGY: linear (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 340:
	Ser Asp Pro Leu Ala Ser Ala Ser Gln Asn Ala Gly Ile Val Ser Val 1 5 10 15
35	Gly Leu Cys Thr Arg Pro Gly Pro Gln Phe Lys Asn Ala Gln Pro Pro 20 25 30
40	Phe Pro Xaa Gln Lys Ala Pro Arg Cys Leu Trp Glu Asn Gln Pro Pro 35 40 45
	Pro Trp Arg Lys Ala Trp Asp Leu Pro Ser His Leu Gly Arg Arg Gly 50 55 60
45	Ile Cys Gly Lys Ser Phe Xaa 65 70
50	(2) INFORMATION FOR SEQ ID NO: 341:
5 5	(i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 85 amino acids (B) TYPE: amino acid (D) TOPOLOGY: linear (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 341:
	Tyr Val Met Ile Phe Lys Lys Glu Phe Ala Pro Ser Asp Glu Glu Leu 1 5 10 15
60	Asp Ser Tyr Arg Arg Glv Glu Glu Tro Asp Pro Glo Lvs Ala Glu Glu

				20					25					30			
	ГÀ2			Kaa	Lys	Glu	Leu	Ala	Gln	Arg	Gln	Xaa		Gly	Gly	Ser	
5	Pro	•	35 Gly	Ala	Cys	Gly	Gly	40 Glu	Pro	Cvs	Gln	Arc	45 Lau	Gln	Glv	Gln	
		50					55			•		60					
10	Val 65	Gln	Pro	Pro	His	Arg 70	Gln	GLy	Ser	Ser	Gln 75	Arg	Arg	Ser	Sto	His 80	•
	Ala	Thr	Gly	Gln	Xaa 85												
15			•			•											
	(2)	INFO	ORMA	rioņ	FOR	SEQ	ID 1	NO: :	342:								
20				_ (A) L 3) T D) T	engt YPE : OPOL	H: 9 ami CGY:	ERIS O am nc a lin PTIO	ino cid ear	acid		• 34	? ·			•	·
25	Mer							Ala						f au	~~~	f	
	1	2	my	,	5	122	361	nra	;,	10	ser.	נביט	210	, Leu	15	reu	
30 [°]	Ser	Leu	Ala	Leu 20	Val	Cys	Leu	Ser	Ala 25	Gly	Ala	ŗàz	Gly	His 30	Arg	Ala	
, 30	Ser	Glu	Ala 35	Gly	His	Ala	Arg	Ala 40	Leu	Thr	Cys	Glu	Mec 45	Gly	Ser	Glu	
35	Phe	Каа 50	Thr	Ala	Xaa	Gly	Leu 55	Val	Leu	Gly	Хаа	Хаа 60	Kaa	Trp	Thr	Kaa	
	Xaa 65	Asn	Gly	Ser	Ala	Gly 70	Pro	Glu	Arg	Arg	Gly. 75	qrp	Arg	Pro	Ala	Ala 80	
40	Phe	Leu	Ala	Val	Phe 85	Leu	Leu	Gly	Asp	Хаа [°] 90							•
	•																•
45	(2)	INFO	ORMAC	MOIT	FOR	SEQ	ID 3	NO: 3	343:	-							
			(i) :	(A) L	ENGT	H: 4	ERIS 8 am	ino		s						
50			(xi)	(יד (ם	OPOL	OGY:	no a lin PTIO	ear	EQ II	OM C	: 34	3:	•			•
55	Met 1	Phe	Gly	Pro	Thr 5	Phe	His	Ser	Leu	Val 10	Leu	Val	Pro	Pro	Trp 15	Pro	,
J.J	Asn.	Leu	.Ser	Leu 20	Leu	His	Phe	Thr	Ser 25	Pro	Val	Gļy	Gln	His 30	Ser	Ser	
60	Phe	Leu	Pro 35	Thr	Ser	Leu	Arg	Leu 40	Kaa	Lys	Lys	Lys	Lys 45	Lys	Lys	Lys	-

. 5																
	(2)	INFO	ORMAT	CION	FOR	SEQ	ID N	iO: 3	44:							
10			(i) s	() (1 (1	A) L1 3) T O) T	ENGT: YPE : DPOL	H: 50 ami: CGY:	s am no ac line	ino a sid ear	acid		: 344	<u> </u>		,	
15	Mec 1			_						_				Asn	Ser 15	910
20	Trp	Leu	Pro	Gln 20	Ala	Ser	Leu	Ala	His 25	Gly	CÀR	Trp	Gļy	Arg 30	Tīp	Mec
	Ser	Asp	Leu 35	Val	Gly	Cys	Ser	Arg 40	Glu	Asn	Lys	Cys	Ala 45	Leu	Arg	Asp
25	His	Ser 50	Glu	Arg	Val	Gln	Gly 55	Хаа	· ·							
		•			·				•							
30	(2)	INFO	CAMSC	NOI	FOR	SEQ	ID N	IO: 3	45:							
			(i) :	()	A) L E) T	engt Ype :	H: 2 ami:	22 ar nío ac	mino cid		ds					
35			(xi)					lin PTIO		EQ I	OM C	: 34	5 :			
	Ser 1	Pro	Leu	Xaa	Phe 5	Cys	Val	Val	Leu	Leu 10	Leu	Gln	Ala	Ala	Arg 15	Gly
40	Tyr	Val	Val	Arg 20	Ļys	Pro	Ala	Gln	Ser 25	Arg	Leu	Asp	Asp	Asp 30	Pro	Pro
45	Pro	Ser	Thr 35	Leu	Leu	Lys	ązĄ	Tyr 40	Gln	Asn	Val	510	Gly 45	Ile	Glu	Lys
	Val	Asp 50	Asp	Val	Val	Lys	Arg 55	Leu	Leu	Ser	Leu	Glu 60	Met	Ala	Asn	Lys
50	Lys 65	Glu	Mec	Leu	Lys	Ile 70	Lys	Gln	Glu	Gln	Phe 75	Met	Lys	ŗĀR	Ile	Val 80
•	Ala	Asn	Pro	Glu	Asp 85	Thr	Arg	Ser	Leu	Glu 90	Ala	yrg	Ile	Ile	Ala 95	Leu
55	Ser	Val	Lys	Ile	Arg	Ser	Tyr	Glu	Glu	His	Leu	Glu	Ļ'ns	His	Arg	Lys

Asp Lys Ala His Lys Arg Tyr Leu Leu Met Ser Ile Asp Gln Arg Lys 115 120 , 125

	Fās	Mec 130		Lys	Asn	Leu	Arg 135	Asn	Thr	Asn	Tyr	Asp 140	Val	Phe	Glu	Lys
5	Ile 145	CÀR	ŢŢŢ	Gly	Leu	Gly 150	Ile	Glu	Tyr	Thr	Phe 155	SLO	510	Leu	Tyr	Tyr 160
	Arg	Arg	Ala	His	Arg 165	Arg	Phe	Val	Thr	Lys 170	Lys	Ala	Leu	Cva	Il a 175	Arg
10	Val	Phe	Gln	Glu 130	Thr	Gln	Lys	Leu	Lys 195	ŗā	Arg	Arg	Arg	Ala 190	Leu	Lys
15	Ala	Ala	Ala 195	Ala	Ala	Gln	Lys	Gln 200	Ala	Lvs	Arg	Arg	Asn 205	Pro	qzA.	Ser
	Pro	Ala 210	Lys	Ala	Ile	Pro	Lys 215	Thr	Leu	Lys	Asp	Ser 220	Gln	Kaa		
											-					
20	(2)	INFO	ORMAI	CION	FOR	SEQ	ID 1	10: 3	46:							
			(i) 5	SEQU	ENCĒ	CHAI	RACTI	ERIS	rics	:					•	
25					A) L					acid	s				•	
25					3) T D) T											
			(xi)		JENC!					EQ II	OM C	: 346	s :			
					_											
30	Met 1-	GTÄ	Ala	Pro	Ala . 5	Ala	Ser		Leu	Leu 10		Leu	Leu	Leu	Phe 15	Ala
	_															
	Cys	Cys	Trp	Ala 20	Pro	GŢĀ	Gly	Ala	Asn 25	Leu	Ser	Gln	Àsp	Asp 30	Ser	Gln
35				-20		•			25			•		30	Ser Val	
35	Pro	Trp	Thr 35	-20 Ser	Asp	Glu	Thr	Val 40	25 Val	Ala 、	Gly	Gly	Thr 45	30 Val	Val	Leu
	Pro	Trp	Thr 35	-20 Ser	Asp	Glu	Thr	Val 40	25 Val	Ala 、	Gly	Gly	Thr 45	30 Val		Leu
35	Pro	Trp Cys	Thr 35	-20 Ser	Asp	Glu	Thr	Val 40	25 Val	Ala 、	Gly	Gly Leu	Thr 45	30 Val	Val	Leu
	Pro	Trp Cys	Thr 35	-20 Ser	Asp	Glu	Thr	Val 40	25 Val	Ala 、	Gly	Gly Leu	Thr 45	30 Val	Val	Leu
	Pro	Trp Cys	Thr 35	-20 Ser	Asp	Glu	Thr	Val 40	25 Val	Ala 、	Gly	Gly Leu	Thr 45	30 Val	Val	Leu
	Pro	Trp Cys	Thr 35	-20 Ser	Asp	Glu	Thr	Val 40	25 Val	Ala 、	Gly	Gly Leu	Thr 45	30 Val	Val	Leu
40	Pro Lys	Trp Cys 50	Thr 35 Gln	20 Ser Val	Asp	Glu Asp	Thr His 55	Val 40 Glu	25 Val	Ala 、	Gly	Gly Leu	Thr 45	30 Val	Val	Leu
40	Pro Lys	Trp Cys 50	Thr 35 Gln ORMAT	20 Ser Val	Asp Lys FOR	Glu Asp SEQ	Thr His 55	Val 40 Glu	25 Val Asp	Ala	Gly	Gly Leu	Thr 45	30 Val	Val	Leu
40	Pro Lys	Trp Cys 50	Thr 35 Gln ORMAT	20 Ser Val	Asp Lys FOR	Glu Asp SEQ CHA	Thr His 55	Val 40 Glu IC: 3	Val Asp	Ala	Gly Ser	Gly Leu	Thr 45	30 Val	Val	Leu
40	Pro Lys	Trp Cys 50	Thr 35 Gln ORMAT	20 Ser Val	Asp Lys FOR	Glu Asp SEQ CHAI	Thr His 55 ID N RACTI	Val 40 Glu IC: 3	Val Asp 47:	Ala	Gly Ser	Gly Leu	Thr 45	30 Val	Val	Leu
40 45	Pro Lys	Trp Cys 50	Thr 35 Gln ORMAT	20 Ser Val	Asp Lys FOR ENCE A) Li B) T D) T	Glu Asp SEQ CHAR	Thr His 55 ID N RACT: H: 1: amin OGY:	Val 40 Glu Glu RIST 54 ar no ac	25 Val Asp 47:	Ala	Gly Ser	Gly Leu 60	Thr 45 Gln	30 Val	Val	Leu
40 45	Pro Lys	Trp Cys 50	Thr 35 Gln ORMAT	20 Ser Val	Asp Lys FOR ENCE A) Li B) T	Glu Asp SEQ CHAR	Thr His 55 ID N RACT: H: 1: amin OGY:	Val 40 Glu Glu RIST 54 ar no ac	25 Val Asp 47:	Ala	Gly Ser	Gly Leu 60	Thr 45 Gln	30 Val	Val	Leu
40 45 50	Pro Lys (2)	Trp Cys 50	Thr 35 Gln Gln (i) S	20 Ser Val Val SEQUIO (C. C. C. C. SEQUIO (C. C. C. SEQUIO (C. SEQUIO (C. C. SEQUIO (C. SEQUIO (C. C. SEQUIO (C. C. SEQUIO (C. C. SEQUIO (C. SEQUIO (C. SEQUIO (C. SEQUIO (C. C. SEQUIO (C. SEQUIO (Asp Lys FOR ENCE A) LI B) T D) T UTENCE	Glu Asp SEQ CHARENGTT YPE: OPPOL	Thr His 55 ID N RACT: amin DGY: SCRII	Val 40 Glu Glu ERIST 54 ar no ac line	25 Val Asp 47: rics: nino id ear 1: Si	Ala Ser	Gly Ser	Gly Leu 60	Thr 45	30 Val	Val	Leu Xaa
40 45	Pro Lys (2)	Trp Cys 50	Thr 35 Gln Gln (i) S	20 Ser Val Val SEQUIO (C. C. C. C. SEQUIO (C. C. C. SEQUIO (C. SEQUIO (C. C. SEQUIO (C. SEQUIO (C. C. SEQUIO (C. C. SEQUIO (C. C. SEQUIO (C. SEQUIO (C. SEQUIO (C. SEQUIO (C. C. SEQUIO (C. SEQUIO (Asp Lys FOR ENCE A) LI B) T D) T UTENCE	Glu Asp SEQ CHARENGTT YPE: OPPOL	Thr His 55 ID N RACT: amin DGY: SCRII	Val 40 Glu Glu ERIST 54 ar no ac line	25 Val Asp 47: rics: nino id ear 1: Si	Ala Ser	Gly Ser	Gly Leu 60	Thr 45 Gln	30 Val	Val Ser	Leu Xaa
40 45 50	Pro Lys (2)	Trp Cys 50 INFO	Thr 35 Gln Gln (i) :	20 Ser Val Val FION () () () SEQUI	Asp Lys FOR A) Li B) T D) T Val Val	Glu Asp SEQ CHAR ENGTH YPE: OPOLO TERP	Thr His 55 ID N RACTI amin OGY: SCRII	Val 40 Glu Glu ERIST 54 ar 1 inc 27 ION	25 Val Asp 47: FICS: mino cid ear H: Si	Ala . Ser . acid	Gly Ser O NO	Gly Leu 60 347 Ala.	Thr 45 Gln	30 Val Trp	Val	Leu Xaa
40 45 50	Pro Lys (2)	Trp Cys 50 INFO	Thr 35 Gln Gln (i) :	20 Ser Val Val FION () () () SEQUI	Asp Lys FOR A) Li B) T D) T Val Val	Glu Asp SEQ CHAR ENGTH YPE: OPOLO TERP	Thr His 55 ID N RACTI amin OGY: SCRII	Val 40 Glu Glu ERIST 54 ar 1 inc 27 ION	25 Val Asp 47: FICS: mino cid ear H: Si	Ala Ser	Gly Ser O NO	Gly Leu 60 347 Ala.	Thr 45 Gln	30 Val Trp	Val	Leu Xaa

		35	•	40		•	45			
5	Gln Pro 50	Gly Pro	Lau Glu	Pro Glu 55	Glu Pro	Arg Ala		Gly.	Arg	Pro
,	Arg Arg	Arg Arg	Asp Leu 70	_	Arg Leu	Gln Ala 75	Gln	Arg .	Arg	Ala 80
10	Gln Arg	Val Ala	Trp Ala 85	Glu Ala	Asp Glu . 90		Glu	Glu	Ala 95	Val
	Ile Leu	Ala Gln 100	Glu Glu	Glu Gly	Val Glu 105	Lys Pro	Ala	Glu 110	Kaa	His
15	Leu Ser	Gly Lys 115	Ile Gly	Ala Lys 120		Arg Xaa	. Kaa 125	Glu	Glu	Lys
20	Gln Ala 130	Arg Lys		Xaa Glu 135	Ala Gļu	Glu Ala 140		Arg	Glu	Xaa
*	Arg Lys 145	Arg Lau	Glu Ser 150	Gln Arg	Glu Xaa		-			
25	(2) INF	OPMATION	FOR SEQ	ID NO:	348':					
•		(i) SEQUE	ENCE CHA	RACTERIS	TICS:					
30		() ()	B) TYPE: D) TOPOL	H: 17 am amino a OGY: lin	cid ear					,
,		(xi) SEQ	JENCE DE	SCRIPTIC	N: SEQ I	D NO: 34	18 :			
3 <i>5</i>	Met Gln 1	Lys Cys	Met Leu 5	Ser Ala	Leu Val		Ile	Gln	Trp. 15	Ser
	Xaa									
40										
	(2) IMF	ORMATION	FOR SEQ	ID NO:	349:					
45		C	A) LENGT B) TYPE: D) TOPOL	H: 10 an amino a OGY: lir	mino acid scid sear		19:			
50	Met Leu 1	Val Cys	Ser Phe 5	Leu Phe	Leu Xaa					
55	(2) INF	OFMATION	•		330:	, ~				
		(i) SEOU	ENCE CHA	RACTERIS	TICS:					

(A) LENGTH: 14 amino acids
(B) TYPE: amino acid

(D) TOPOLOGY: linear

```
(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 350:
      Val Ile Glu Leu Cys Val Ser Leu Arg Ser Leu Asn Phe Kaa
                       5
 5
      (2) INFORMATION FOR SEQ ID NO: 351:
10
             (i) SEQUENCE CHARACTERISTICS:
                   (A) LENGTH: 18 amino acids
                   (E) TYPE: amino acid
                   (D) TOPOLCGY: linear
             (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 351:
15
      Met Cys Glu Phe Kaa Kaa Kaa Ile Met Kaa Leu Ala Gly Tyg Phe Ala
                       5
                                        10
      Cys Kaa
20
      (2) INFORMATION FOR SEQ ID NO: 352:
25
             (i) SEQUENCE CHARACTERISTICS:
                    (A) LENGTH: 62 amino acids
                    (B) TYPE: amino acid
                   (D) TOPOLOGY: linear
30 .
            (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 352:
     Met Val Gly Gly Tyr Val Ser Ser Phe Ser Phe Pro Pro Val Ser Ser
                                        10
35
      Ser Leu Leu Pro Ala Ser Phe Ala Phe Pro Phe Leu Pro Gly Thr
          20
      Pro Cys Pro Phe Leu Tyr Phe Leu Pro Ser Pro Phe Ser Pro Leu Pro
                         40
40
     Leu Ser Leu Thr Arg Ser Asn Ser Phe Leu Leu Asn Gly Xaa
          50
                             55
                                   60
45
      (2) INFORMATION FOR SEQ ID NO: 353:
             (i) SEQUENCE CHARACTERISTICS:
                   (A) LENGTH: 33 amino acids
50
                    (B) TYPE: amino acid
                   (D) TOPOLOGY: linear
             (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 353:
     Glu Lys Lys Ser Met Ser Val Ser Asp Ile Tyr Ala Leu Glu Ser Leu
55
     Gly Arg Ser Leu Phe Thr Leu Asn Ser Met Cys Leu Pro Leu Ser Phe
60 .
     Kaa
```

5	(2)	INFO	RMAT	TON_	FOR	SZQ	ID N	iO: 3	54:							
10				() () ()	A) LE 3) TY O) TO	ngt: (PE:)Pol(i: 24 amin CGY:	ERIST 45 ar no ac line PTION	mino cid ear	acio		354	:			
15	Mec 1	Gly	Gly	Ala	Ser S	Arg	Arg	Val	Glu	Ser 10	Gly	Ala	dxL	Ala	Tyr 15	Leu
••	Ser	520	Leu	Val 20	Leu	Arg	Lys	Glu	Leu 25	Glu	Ser	Leu	Val	Glu 30	Asn	Glu
20 [.]	Gly	Ser	Glu 35	Val	Leu	Ala	Leu	Pro 40	Glu	Leu	Pro	Ser	Ala 45	His	SIO.	Ile
	Ile	Phe 50	Trp	Asn	Leu	Leu	Trp 55	īĀī	Phe	Gla	Arg	Leu 60	Arg	Leu	Pro	Ser
25	Ile 65	Leu	Pro	Gly	Leu	Val 70	Leu	Ala	Ser /	Cys	Asp 75	Gly	Pro	Ser	Kaa	Ser 80
30	Gln	Ala	520	Ser	Pro 85	Trp	Leu	Thr	510	qzA 0e	Pro	Ala	Ser	Val	Gln 95	Val
	Arg	Leu	Leu	Trp 100	Asp	Val	Leu	Thr	Pro 105	Asp	Pro	Asn	Ser	Cys 110	Pro	910
35	Leu	Tyr	Val 115	Leu	Trp	Arg	Val	His 120	Ser	Gln	Ile	510	Gln 125	Arg	Val	Val
	Trp	Pro 130		Pro	Val	Pro	Ala 135	Ser	Leu	Ser	Leu	Ala 140	Lau	Leu	Glu	Ser
40 .	Val 145		Arg	His	Val	Gly 150		Asn	Glu	Val	His 155	Lys	Ala	Val	Gly	Leu 160
45	Leu	Leu	Glu	Thr	Leu 165	Gly	Pro	Pro	250	Thr 170		Leu	His	Leu	Gln 175	Arg
	. Gly	Ile	Tyr	Arg 180		Ile	Leu		Leu 135	Thr	Mec	Ala	Ala	Leu 190	Gly	Lys
50	qzA	His	Val 195		Ile	Val	Ala	. Phe 200		Lys	Lys	Tyr	Lys 205	Ser	Ala	Phe
	Asn	Lys 210		Ala	Ser	Ser	Met 215		· Lys	Glu	. Glu	Leu 220	Arg	His	Arg	Arg
55	Ala 225		Mec	Pro	Thr	230		: Ala	. Ile	Asp	Cys 235		Lys	Cys	Phe	Gly 240
60	Ala	Pro) Pro	Glu	Cys 245						•					

```
(2) INFOPMATION FOR SEQ ID NO: 355:
 5
            (i) SEQUENCE CHARACTERISTICS:
                   (A) LENGTH: 35 amino acids
                   (B) TYPE: amino acid
                   (D) TOPOLCGY: linear
            (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 355:
10
     Met Lys Phe Ser Leu Leu Phe Leu Pro Met Leu Leu Ile Leu Lys Pro
      Asp Leu Phe His Ile Ser Ile Cys Thr Leu Ala Ala Cys Gly Leu Thr
15
        20 25
      Phe Pro Kaa
            35
20
      (2) INFORMATION FOR SEQ ID NO: 356:
          (i) SEQUENCE CHARACTERISTICS:
25
                  (A) LENGTH: 22 amino acids
                   (B) TYPE: amino acid
                   (D) TOPOLOGY: linear
            (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 356:
30
     Met Leu Phe Phe Phe Ile Leu His Leu Leu Ser Ile Met Ser Phe Leu
                      5
                            10
     Ser Pro Asp Ile Met Kaa
                 20
35
    (2) INFORMATION FOR SEQ ID NO: 357:
40
            (i) SEQUENCE CHARACTERISTICS:
                  (A) LENGTH: 98 amino acids
                   (B) TYPE: amino acid .
                  (D) TOPOLCGY: linear
            (xi) SEQUENCE DESCRIPTION: SEO ID NO: 357:
45
     Met Phe Gly Leu Leu Val Glu Ser Gln Thr Leu Leu Glu Glu Asn Ala
     Val Gln Gly Thr Glu Arg Thr Leu Gly Leu Asn Ile Ala Pro Phe Ile
50
                     . 25
     Asn Gln Phe Gln Val Pro Ile Arg Val Phe Leu Asp Leu Ser Ser Leu
55
     Pro Cys Ile Pro Leu Ser Lys Pro Val Glu Leu Leu Arg Leu Asp Leu
     Met Thr Pro Tyr Leu Asn Thr Ser Asn Arg Glu Val Lys Val Tyr Val
             70
                                          75
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548

Cys Xaa Ile Trp Glu Asp Leu Thr Ala Ile Pro Phe Trp Val Ser Tyr Val Pro (2) INFORMATION FOR SEQ ID NO: 358: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 78 amino acids (B) TYPE: amino acid (D) TOPOLOGY. linear (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 358: Met Phe Gly Ala His Arg Kaa Trp Gln Gly Ser Val Leu Leu Phe Leu 5 · 10 Ser Phe Ala Trp Gly Asn Gly Gly Ser Val Thr Phe Ser Asp Val Pro 20 25 30 Arg Val Met Pro Leu Ala Gly Gly Pro Kaa Kaa Gln Val Ser Ser Thr 40 -Pro Arg Pro Pro Pro His Gln Val Thr Ser Ser Pro Gly Leu Glu Ser 50 55 60 Ala His Ile Val Cys Pro Glu Arg Lys Lys Lys Lys Lys 70 (2) INFORMATION FOR SEQ ID NO: 359: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 31 amino acids (3) TYPE: amino acid (D) TOPOLOGY: linear (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 359: Thr Leu Leu Kaa Phe Leu Kaa Leu Leu Thr Thr Glu Gly Gly Arg Glu 1 . 5 Asn Ile Phe Kaa Gly Arg Ile Leu Kaa Leu Gln Kaa Ser Pro Kaa 20 25 (2) INFORMATION FOR SEO ID NO: 360: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 57 amino acids (B) TYPE: amino acid (D) TOPOLOGY: linear (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 360:

Met Leu Ser Phe Phe Ile Cys Leu Leu Ile Phe Val His Leu Leu Leu

	Leu Ser Phe	Leu Ile 20	Ser Asp	grp o	Pro 25	Pro	Pro	Thr	Gly	Ser 30	Ala	Хаа
5	His Lys Ile	Leu Arg	Leu Met	Val 40	Val	Gln	Arg	Leu	Ser 45	Leu	Leu	Asp
	Gln Arg Lys 50	Arg Trp	Ser Glu		Хаа					-		
10												
	(2) INFORMA	TION FOR	SEQ ID	NO:	361:							•
15		(B) T	ENGTH: YPE: am OPOLOGY	3 ami ino a : lin	no a cid ear	cids		: 36	1:			
20	Lys Tyr Xaa l		·									
	^			-								
25	(2) INFORMA	TION FOR	SEQ ID	NO:	362:					•		
	(<u>i</u>)		ENGTH:	32 am	ino		s					
20			YPE: am									
30	(xi)	(D) T SEQUENC	OPOLOGY E DESCR			EQ I	D NO	: 36	2:			
30	Trp Ser Ser	SEQUENC	E DESCR	IPTIO	N: 5	Thr				Arg		Arg
.35	Trp Ser Ser 1	SEQUENC Ala Ser 5	E DESCR	IPTIO	N: S	Thr 10	Thr	Pro	Glu		15	
	Trp Ser Ser	SEQUENC Ala Ser 5	E DESCR	IPTIO	N: S	Thr 10	Thr	Pro	Glu		15	
	Trp Ser Ser 1	SEQUENC Ala Ser 5 Asp Thr	E DESCR	IPTIO	N: S: Val Lys	Thr 10	Thr	Pro	Glu	Ser	15	
.35	Trp Ser Ser 1	SEQUENC Ala Ser 5 Asp Thr	E DESCR	IPTIO	N: S: Val Lys	Thr 10	Thr	Pro	Glu	Ser	15	
.35	Trp Ser Ser 1	SEQUENC Ala Ser 5 Asp Thr 20	E DESCR Ser Sei Leu Pro	IPTIO	N: S: Val Lys 25	Thr 10	Thr	Pro	Glu	Ser	15	
.35	Trp Ser Ser 1 Pro Arg Met (2) INFORMA	SEQUENC Ala Ser 5 Asp Thr 20 TION FOR SEQUENCE (A) L	E DESCR Ser Ser Leu Pro	IPTIO TERIS TERIS TERIS	Val Lys 25 TICS	Thr 10 Gly	Thr	Pro	Glu	Ser	15	
.35	Trp Ser Ser 1 Pro Arg Met (2) INFORMA (i)	SEQUENCE Ala Ser 5 Asp Thr 20 TION FOR SEQUENCE (A) I (B) T	E DESCR Ser Sei Leu Pro SEQ ID CHARAC ENGTH: TYPE: am	NO: TERIS 28 am ino a : lin	Val Lys 25 TICS aino acid hear	Thr 10 Gly	Thr	Pro	Glu Leu	Ser	15	
.35	Trp Ser Ser 1 Pro Arg Met (2) INFORMA (i) (xi) Asp Ile Phe	SEQUENCE Ala Ser 5 Asp Thr 20 TION FOR SEQUENCE (A) L (B) T (D) T SEQUENC	E DESCR Ser Sei Leu Pro SEQ ID CHARAC LENGTH: YPE: am OPOLOGY E DESCR Leu Lei	NO: TERIS 28 am ino a : lin	Val Lys 25 TICS aino acid acar N: S	Thr 10 Gly : acid	Thr His	Pro Phe	Glu Leu	Ser 30	15 Met	Xaa Ile
.35 40 45	Trp Ser Ser 1 Pro Arg Met (2) INFORMA (i) (xi) Asp Ile Phe 1	SEQUENCE Ala Ser 5 Asp Thr 20 TION FOR SEQUENCE (A) L (B) T (D) T SEQUENCE Val Phe 5	E DESCR Ser Sei Leu Pro SEQ ID CHARAC ENGTH: TYPE: am TOPOLOGY E DESCR Leu Leu	NO: TERIS 28 am ino a : lin IPTIO	Val Lys 25 TICS acid lear N: S	Thr 10 Gly : acid	Thr His	Pro Phe : 36	Glu Leu	Ser 30	15 Met	Xaa Ile
.35	Trp Ser Ser 1 Pro Arg Met (2) INFORMA (i) (xi) Asp Ile Phe	SEQUENCE Ala Ser 5 Asp Thr 20 TION FOR SEQUENCE (A) L (B) T (D) T SEQUENCE Val Phe 5	E DESCR Ser Sei Leu Pro SEQ ID CHARAC ENGTH: TYPE: am TOPOLOGY E DESCR Leu Leu	NO: TERIS 28 am ino a : lin IPTIO	Val Lys 25 TICS acid lear N: S	Thr 10 Gly : acid	Thr His	Pro Phe : 36	Glu Leu	Ser 30	15 Met	Xaa Ile

(2) IMFORMATION FOR SEQ ID NO: 364:

```
(i) SEQUENCE CHARACTERISTICS:
                  (A) LENGTH: 15 amino acids
                  (E) TYPE: amino acid
                  (D) TOPOLOGY: linear
            (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 364:
     Thr Leu Thr Ser Phe Leu Glu Leu Pro Leu Ala Pro Glu Pro Xaa
       1 5 10
10
     (2) INFORMATION FOR SEQ ID NO: 365:
15
          (i) SEQUENCE CHAPACTERISTICS:
                 (A) LENGTH: 34 amino acids
                  (B) TYPE: amino acid
                  (D) TOPOLOGY: linear
            (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 365:
20
     Met His Arg Tyr Ile Thr Phe Phe Lys Cys Phe Arg Ser Val Ile Leu
     Asp Leu Leu Phe Ile Leu Ser Pro Leu Ser Gln Gly Cys Phe Ile Leu
25
         20 25 30
     Phe Kaa
30
     (2) INFORMATION FOR SEQ ID NO: 366:
            (i) SEQUENCE CHARACTERISTICS:
35
                 (A) LENGTH: 66 amino acids
                  (B) TYPE: amino acid
                  (D) TOPOLOGY: linear
            (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 366:
40^{\circ} Met Phe Gly Phe Ile Phe Leu Leu Leu Ile Phe Cys Ile Xaa Leu Cys
      1 5 10
     Ser Arg Thr Leu Ser Thr Phe Ile Pro Lys Leu Val Gly Phe Leu Tyr
                       25
45
     Trp Lys Phe Ser Ile Asn Leu Ser Leu Leu Leu Thr Leu Ile Lys Lys
          35
     Lys Lys Lys Lys Lys Thr Pro Arg Gly Gly Pro Gly Xaa Gln Ser
50
                          55
     Pro Pro
55
     (2) INFORMATION FOR SEQ ID NO: 367:
```

(i) SEQUENCE CHAPACTERISTICS:

(A) LENGTH: 317 amino acids

(B)	TYPE:	amino	acid

(D) TOPOLOGY: linear

			(xi)	SEQ	UENC	E DE	SCFI	PTIO	N: S	EQ I	D NO	: 36	7:			
5	Met 1	Pro	Gly	Leu	Gly S	Arg	Pro	Arg	Gln	Ala 10	Arg	dr <u>T</u>	Thr	Leu	Mec 15	Leu
10	Leu	Leu	Ser	Thr 20	Ala	Met	Tyr	Gly	Ala 25	His	Ala	PIO	Leu	Leu 30	Ala	Leu
	Cys	His	Val 35	Asp	Gly	Arg	Val	Pro 40	Phe	Arg	Pro	Ser	Ser 45	Ala	Val	Leu
15	Leu	Thr 50	Glu	Leu	Thr	Lys	Leu 55		Leu	Cys	Ala	Phe 60	Ser	Leu	Leu	'Val
	-Gly -65	drī	Gln	Ala	Trp	Pro 70	Gln	Gly	Pro	Pro	₽ <u>r</u> o 75	Ţzp	Arg	Gln	Ala	Ala 80
20	Pro	Phe	Ala	Ļeu	Ser 85	Ala	Leu	Leu	iàr	90		Asn	Asn	Asn	Leu 95	Val
25	Ile	Tyr.	Leu	Gln 100	Arg	Tyr	Met	Asp	Pro 105	Ser	Thr	Tyr	Gln	Val 110	Leu	Ser
	Asn	Leu	Lys 115	Ile	GJĀ	Ser	Thr	Ala 120	Vaļ	Leu	Tyr	Суз	Leu 125	Cys	Leu	Arg
30	His	Arg 130	Leu	Ser	Val	Arg	Gln 135	Gly	Leu	Ala	Leu	Leu 140	Leu	Leu	Met	Ala
	Ala 145	Gly	Ala	Cys	Tyr	Ala 150	Ala	Gly	Gly	Leu	Gln 155	Val	510	Gly	Asn	Thr 160
35	Leu	Pro	Ser	Pro	Pro 165	Pro	Ala	Ala	Ala	Ala 170	Ser	Pro	Met	Pro	Leu 175	His
40	Ile	Thr	Pro	Leu 180	Gly	Leu	Leu	Leu	Leu 185	Ile	Leu	Tyr	Cys	Leu 190	Ile	Ser
	Gly	Leu	Ser 195	Ser	Val	Tyr	Thr	G1u 200	Leu -	Leu	Met	Lys	Arg 205	Gln	Xaa	Leu
45	Pro	Leu 210	Ala	Leu	Gln	Asn	Leu 215	Phe	Leu	Tyr	Thr	Phe 220	Gly	Val	Leu	Leu
	Asn 225	Leu	Gly	Leu	His	Ala 230	Gly	Gly	Gly	Ser	Gly 235	Pro	Gly	Leu	Leu	Glu 240
50	Gly	Phe	Ser	Gly	Trp 245	Ala	Ala	Leu	Val	Val 250	Lau	Ser	Gln	Ala	Leu 255	Asn
55	GJÀ	Leu	Leu	Met 260	Ser	Ala	Val	Mec	Lys 265	His	Gly	Ser	Ser	Ile 270	Thr	Arg
	Leu	Phe	Val 275	Val	Śer	Cys	Ser	Leu 280	Val	Val	Asn	Ala	Val 285	Leu	Ser	Ala
60	Val	Leu 290	Leu	Arg	Leu	Gln	Leu 295	Thr	Ala	Ala	Phe	Phe 300	Leu	Ala	Thr	Leu

Leu Ile Gly Leu Ala Met Arg Leu Tyr Tyr Gly Ser Arg 310 315 5 (2) INFORMATION FOR SEQ ID NO: 368: (i) SEQUENCE CHARACTERISTICS: 10 (A) LENGTH: 31 amino acids (B) TYPE: amino acid (D) TOPOLOGY: linear (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 368: 15 Met Gly Glu Gln Pro His Phe Ser Leu Cys Val Leu Leu Ala Ala Val Arg Glu Asp Kaa Asp Pro Kaa Val Phe Pro Cys Cys Phe Leu Kaa 25 30 20 20 (2) INFORMATION FOR SEQ ID NO: 369: 25 (i) SEQUENCE CHAPACTERISTICS: (A) LENGTH: 43 amino acids (E) TYPE: amino acid (D) TOPOLOGY: linear (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3.69: 30 Met Ser Phe Ile Ala Leu His Pro Leu Leu Pro Glu Ala 'Ala Leu Gly Val Pro Gly Gln Ser Pro His Arg Pro Leu Trp Gln Thr Gln Cys Cys .35 25 Val Ala Pro Pro Gln Pro Arg Ala Glu Phe Xaa 40 35 40 (2) INFORMATION FOR SEQ ID NO: 370: (i) SEQUENCE CHARACTERISTICS: 45 (A) LENGTH: 255 amino acids (B) TYPE: amino acid-(D) TOPOLOGY: linear (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 370: Met Val Thr Ala Leu Thr Leu Leu Ala Phe Pro Leu Leu Leu His 1 . 5 Ala Glu Arg Ile Ser Leu Val Phe Leu Leu Phe Leu Gln Ser Phe 25 30 55 Leu Leu His Leu Leu Ala Ala Gly Ile Pro Val Thr Thr Pro Gly. 40 Pro Phe Thr Val Pro Trp Gln Ala Val Ser Ala Trp Ala Leu Met Ala 60

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•	Thr 65	Gln	ፐኪድ	Phe	Tyr	Ser 70	Thr	Gly	His	Gln	Pro 75	Val	Phe	Pro	Ala	Ile 30
5	His	Trp	His	Ala	Ala '85	Phe	Val	Gly	Phe	90	Glu	Gly	His	Gly	Ser 95	Cys
.0	Thr	Trp	Leu	Pro 100	Ala	Leu	Leu	Val	Gly 105	Ala	Asn	Thr	Phe	Ala 110	Ser	His
	Leu	Leu	Phe 115	Ala	Val	Gly	Cys	Pro 120	Leu	Leu	Leu		Trp 125	Pro	Phe	Leu
1.5	,Cys	Glu 130	Ser	Gln	Gly	Leu	Arg 135		Arg	Gln	Gln	Pro 140	Pro	Gly	Asn	Glu_
	Ala 145	Asp	Ala	Arg	Val	Arg 150	Pro	Glu	Glu	Glu	Glu 155	Glu	Pro	Leu		Glu 160
20			•		165			Gln		170					175	
25				130				Ile	185					190		
			195					Arg 200	•			•	205			
30		210					215					220				·Ser
	225					230		Ala			235					240
35	Val	Ser	Ser	Trp	Phe 245	Arg	Gln	Leu	Phe	Leu 250		Gln	Gln	Arg	Xaa 255	
40	(2)	INF	OPMA	TION	FOR	SEQ	ID.	NO:	371:							
45					(A) I (B) T (D) T	ENGT TYPE : TOPOI	TH: 2 : ami LOGY:	TERIS 20 an ino a : lir IPTIC	mino acid near	acio): 37	1:			
50	Met.		. Gly	Pro	Trp 5		- Glu	Glu	Ala	Leu 10		Arg	Leu	Pro	Thr 15	
	Ser	Gly	Leu	20												•
55	(2)	INF	OŖM	MOITA	FOF	: SEQ) ID	NO:	372:							
			(i)	_				reris 64 ar			âs					

(B) TYPE: amino acid

(D) TOPOLOGY: linear (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 372: Met Ala Thr Leu Glu Xaa Asn Gln Arg Glu Val Asp Arg Glu Ile Arg 5 Ser Leu Leu Tro Phe Leu Leu Cys Glu Ile Val Ser Gly Tro Leu 25 10 Cys Pro Glu Gly Pro Trp Phe Ser Gln Gly Cys Gln Ile Tyr Lys Asn 35 40 Leu Ser Ser Ser Ser Tyr Asn Leu Ser Phe Leu Leu Ser Leu Xaa 15 (2) INFORMATION FOR SEQ ID NO: 373: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 40 amino acids 25 (B) TYPE: amino acid (D) TOPOLOGY: linear (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 373: Met Ile His Ser Gly Cys Thr Ser Gln Cys Leu Glu Gly Phe Phe Leu 30 Ile Phe Leu Leu Asp Phe Asn Pro Val Leu Ala Leu Asp Leu Ile Gly 20 . 25 . 35 Ile Met Arg Lys Ala Ser His Xaa 3.5 40 (2) INFORMATION FOR SEQ ID NO: 374: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 35 amino acids (B) TYPE: amino acid 45 (D) TOPOLOGY: linear (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 374: Met Val Phe Ser Ala Arg Val Ser Leu Tyr Thr Arg Phe Lys Val Ile 10 50

Leu Leu Ser Leu Ieu Ile Met Ile Leu His Val Cys Trp Val Trp Val 20 25 30

(2) INFORMATION FOR SEQ ID NO: 375:

Ile Leu Xaa

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555
             (1) SEQUENCE CHARACTERISTICS:
                  (A) LENGTH: 11 amino acids
                   (B) TYPE: amino acid
                   (D) TOPOLOGY: linear
             (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 375:
      Gly Leu Leu Tyr Ile Met Tyr Cys Asn Ile Kaa
                      5
 10
      (2) INFORMATION FOR SEQ ID NO: 376:
            (i) SEQUENCE CHARACTERISTICS:
 15
                  (A) LENGTH: 64 amino acids
                  (E) TYPE: amino acid
                  (D) TOPOLOGY: linear
            (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 376:
 20
      Met Asn Asn Gly Leu Leu Gln Gln Pro Ser Ala Leu Met Leu Leu Pro
                             10
      Cys Arg Pro Val Leu Thr Ser Val Ala Leu Asn Ala Asn Phe Val Ser
           . 20 .
                                   25
25
      Trp Lys Ser Arg Thr Lys Tyr Thr Ile Thr Pro Val Lys Met Arg Lys
                               40 '
      Ser Gly Gly Arg Asp His Thr Gly Gly Asn Lys Asp Arg Gly Ile Xaa
30
      55 .
                                      60
35 - .
     (2) INFORMATION FOR SEQ ID NO: 377:
           (i) SEQUENCE CHARACTERISTICS:
40
                  (A) LENGTH: 19 amino acids
                  (B) TYPE: amino acid
                  (D) TOPOLOGY: linear
            (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 377:
45
     Met Arg Lys Gln Arg Leu Val Pro Met Tyr Leu Gly Leu Ile Tyr Ile
           . 5
                              10
     Leu Leu Xaa
50
     (2) INFORMATION FOR SEQ ID NO: 378:
55
```

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 5 amino acids

(B) TYFE: amino acid

(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 378:

```
Met Arg Gln His Xaa
      1 . 5
 5
      (2) INFORMATION FOR SEQ ID NO: 379:
            (i) SEQUENCE CHARACTERISTICS:
                 (A) LENGTH: 17 amino acids
10
                  (B) TYPE: amino acid
                  (D) TOPOLOGY: linear
            (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 379:
      Leu Leu Pro Val Leu Ala Ser Ser Val Pro Ser His Ser Ala Thr .
15
      i
            5 : 10
     Xaa
20
     (2) INFORMATION FOR SEQ ID NO: 380:
           (i) SEQUENCE CHARACTERISTICS:
25
                 (A) LENGTH: 84 amino acids
                  (E) TYPE: amino acid
                  (D) TOPOLOGY: linear
            (x1) SEQUENCE DESCRIPTION: SEQ ID NO: 380:
30 Met Leu Pro Leu Leu Leu Phe Thr Tyr Leu Asn Ser Phe Leu His Gln
      1 5
                                  10 , 15
      Arg Ile Pro Gln Ser Val Arg Ile Leu Gly Ser Leu Val Ala Ile Leu
.35
      Leu Val Phe Leu Ile Thr Ala Ile Leu Val Lys Val Gln Leu Asp Ala
                   40
      Leu Pro Phe Phe Val Ile Thr Met Ile Lys Ile Val Leu Ile Asn Ser
40
          50 55
      Phe Gly Ala Ile Leu Gln Gly Ser Leu Phe Gly Leu Ala Gly Leu Leu
                       70
                                        75
45
      Pro Ala Ser Xaa
 50
    (2) INFORMATION FOR SEQ ID NO: 381:
            (i) SEQUENCE CHARACTERISTICS:
                 (A) LENGTH: 21 amino acids
                  (B) TYPE: amino acid
 55
                  (D) TOPOLOGY: linear
```

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 381:

Ser Pro Xaa Thr Xaa 20

5

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(2) INFORMATION FOR SEQ ID NO: 382:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 29 amino acids

(B) TYPE: amino acid

(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 382:

Ile Thr Gly Leu Ala Pro Ala His Ile Thr Ala Val Kaa 20 25

20

25

(2) INFORMATION FOR SEQ ID NO: 383:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 34 amino acids

(B) TYPE: amino acid

(D) TOPOLOGY: linear.

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 383:

Met Lys Asp Leu Leu Gln Arg Asn Pro Trp Lys Asn Ser Leu Leu Leu Leu 1 5 10 . 15

Leu Gln Val Cys Gln Ala Phe Leu Val Cys Ser Leu Thr Gln Leu Ala 20 25 30

Val Xaa

40

45

35

(2) INFORMATION FOR SEQ ID NO: 384:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 47 amino acids

(B) TYPE: amino acid

(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 384:

Met Ser Glu Ser His Lys Ile Trp Trp Cys Tyr Arg His Leu Ala Phe 50 1 5 . 10 . 15

Pro Leu Leu Thr Leu Ile Leu Tyr Pro Ala Thr Leu Gly Arg Ser Val
20 25 30

55 Phe Cys His Asp Cys Lys Phe Pro Glu Ala Ser Pro Ala Met Kaa 35 . 40 45

60' (2) INFORMATION FOR SEQ ID NO: 385:

			(i)	SEQU ()				ERIS' 5 am			s					
5			(xi)	•	D) T	OPOL	OGY :	no a lin PTIO	ear	EQ II	D NO	: 38	5:			
•	Mor	7.00												T	77-7	C1-
10	1	pec	Asn	AL Y	. 5	Mec	Val	wia	ser	10	GIY	AIA	. va.	Leu	15	GIN
	Val	Cys	Arg	Gly 20	Xaa	Gly	Gln	Gly	Xaa 25							
1.5																
15	(2)	INF	ORMA:	rion	FOR	SEQ	ID I	NO: .]	386:						•	
			(i)													
20			•					8 am no a		acid	S					
			(xi)					lin PTIO		EQ İI	on c	: 38	6 :			
25	Met 1	Gln	Leu	Leu	Leu 5	Leu	Gly	Leu	Ile	Arg 10	Ser	Gln	Pro	Ser	Pro 15	Pro
	Pro	Ser	Leu	Cys 20	Leu	Met	Leu	Cys	Pro 25	Cys	Leu	Pro	Cys	Leu 30	Arg	Tyr
30	Ser	Pro	Phe 35	Val	Pro	Gln	His	Pro 40	Cys	Pro	Leu	Pro	Leu 45		Leu	Cys
35	Leu	Ala 50	Gly	Cys	Ser	Ser	Leu 55	Ser	Val	Gln	Asp	Lys 60	Cys	Ser	Trp	Pro
23	Ty: 65	Pro	Ile	Xaa												
				,												
40	(2)	INF	ORMA:	TION	FOR	SEO	ID.	vo: 1	387:							
									•							
45			(1)	(A) L B) T	ENGT YPE :	H: 3 ami	4 am no a	ino cid		s					
			(xi)	SEQ				lin PTIO		EQ I	D NO	: 38	7:			
50	Lys 1	Glu	Phe	Phe	Val 5	Phe	Leu	Phe	Val	Cys 10	Leu	Phe	Trp	Leu	Leu 15	Ser
	Asn	Thr	Pro	Leu 20	Thr	Phe	Ile	Ser	Ile 25	Ile	Leu	Gln	Arg	Lys 30	Glu	Thr
55	Asn	Xaa											•			

60 (2) INFORMATION FOR SEQ ID NO: 388:

			(1)	ಶಿವಲ್ಲೀ			APAC TH:				ds					
5		•					: am									
ر			(vi) SE(FCCT.			sen :	א כו	.	20.			
10	Ser 1			Met		. Le					. Ala			Xea	1	
10					٠											
	(2)	INF	ORM	MOIT	FOF	SEÇ] ID	NO:	389:							
15-			(i)	SEQU	יבאור:	CHI	ים אים ו	'EDT (TTC	· .		٠				
			(-)	-			TH:					•				
					(B) ~	TYPE	: am:	ino a	acid	•						
			(351)	SEÇ			LOGY.			EO 1	אוֹר אוֹר	. 39				
20			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		<u> </u>				/IV	د پيدر	140). <u>.</u>) , ;			
	1				5					7.0						
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25					•											
	(2)	INF	ORMA	TION	FOR	SEO	TD	NO -	390 -		,					
													•			
			(<u>i</u>)	SEQU			RACT TH: 1				d.c					
30							ami			, ac:	دن.		•			
			1				LOGY :									
			(36L)	SEQ	UENC	E DE	SCRI	PTIO	N: S	EQ I	D NC): 39	0:	•		1
35		Thr	Lys	Ala	Arg	Leu	Phe	Arg	Leu	Trp	Leu	Val	Leu	Gly	Ser	Val
33	1				5					10				•	15	
	Phe	Met	Ile	Leu	Leu	Ile	Ile	Val	Tyr	Trp	Asp	Ser	Ala	Gly	Ala	Ala
				20					25					30		
40	His	Phe	Tyr	Leu	His	Thr	Ser	Phe	Ser	Arg	Pro	His	Thr	Glv	Pro	Pro
			35	•		-		40					45	-		
	Leu	Pro	Thr	Pro	Glv	Pro	Asp	Ara	Aso	Ara	Glu	ī.eu	The	ھاھ) = D	Sar
15		50					55	3				60			موضع	SET
45	Asp	Va i	250	V = =	Phe	Lau	7	V= -	Dho	T	C	77-	~1	••• •		
	65		ر د	Xaa	FILE	70	ىزھم	AGG	File	nea	75	Ala	GIY	vai	rys	SO GID
	C	١	16	,		_										
50	ser	ASP	xaa	Pro	Arg 85	Lys	Glu	Thr	Glu	Gln 90	Pro	Pro	Ala	Pro	Gly 95	Ser
													Y			
	Met	Glu	Glu	Ser	Val	Arg	Xaa	Tyr		Trp	Ser	Pro	yra		Ala	Arg
				100					105					110		
55	Arg	Thr	Gln	Thr	Arg	Ala	Gly		Xaa	Arg	Xaa	Gly	Gly	Xaa	Cys	Cys
			115					120	•				125			
	Gly	Ala	Ser	Ala	Pro	Xaa	Pro	Ala	Trp	Pro	Ser	Pro	Pro	Arg	Ser	Ala
60		130	•				135					140		-		

His Ser Thr Thr Ser Pro Thr Arg Ser Kaa 150 5 (2) INFORMATION FOR SEQ ID NO: 391: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 9 amino acids 10 (B) TYPE: amino acid (D) TOPOLOGY: linear (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 391: Met Val Lou Lou Cly Lou Lou Ser Xaa 5 (2) INFORMATION FOR SEQ ID NO: 392: 20 (i) SEQUENCE CHARACTERISTICS: · (A) LENGTH: 61 amino acids (B) TYPE: amino acid (D) TOPOLOGY: linear 25 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 392: Met Cys Ile His Val Phe Met Xaa Val Leu Trp Val Leu Phe Leu Leu 10 30 Ash Pro Leu Cys Thr Gly Leu Trp Pro Leu Xaa Ash Cys Phe Ser Val 25 20 Leu Arg His Ala Asp Trp Val Leu Gly Ala Asp Tyr Lys Gly Glu Glu 35 Leu Asn Arg His Gln Gly Pro Met Lys Pro Lys Asp. Xaa 5.5. 60 40 (2) INFORMATION FOR SEQ ID NO: 393: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 447 amino acids 45 (E) TYPE: amino acid (D) TOPOLOGY: linear (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 393: Met Leu Leu Gly Leu Leu Met Ala Ala Cys Phe Thr Phe Cys Leu Ser 50. 5 - 10 His Gln Asn Leu Lys Glu Phe Ala Leu Thr Asn Pro Glu Lys Ser Ser 20. 55 Thr Lys Glu Thr Glu Arg Lys Glu Thr Lys Ala Glu Glu Glu Leu Asp 40 Ala Glu Val Leu Glu Val Phe His Pro Thr His Glu Trp Gln Ala Leu-55

50 .

	65 GIN	Pro	GTÀ	Gin	Ala	70	Pro	Ala	GīĀ	Ser	75	vai	AIŞ	Leu	Ast.	20
5	Gl'n	Thr	Gly	Glu	Arg 85	Glu	Ala	Lys	Leu	Gln 90	Tyr	Glu	Asp	Lys	Phe 98	yrg
	Asn	Asn	Leu	Lys 100	Gly	Lys	Arg	Leu	Asp 105	Ile	Asn	Thr	Ast.	Thr 110	Dj u	Thr
10	Ser	Gln	Asp 115	Leu	Lys	Ser	Ala	Leu 120	Ala	Lys	Phe	Lys	Glu 125	Gly	ALE	314
15	Mec	Glu 130	Ser	Ser	Lys	Glu	Asp 135	Lys,	Ala	Arg	Gln	Ala 140	Glu	Val	Lys	Arg
	Leu 145	Phe	Arg	Pro	Ile	Glu 150	Glu	Leu	Lys	Lys	Asp 155	Phe	Asp	Glu	Leu	Asn 160
20	Val	Val	Ile	Glu	Thr. 165	qzA į	Mec	Gln	Ile	Met 170	Val	Arg	Leu	Ile	Ast. 175	lys
	Phe	Asn	Ser	Ser 180	Ser	Ser	Ser	Leu	Glu 185	Glu	Lys	Ile	Ala	Ala 190	Leu	?ne
25	Asp	Leu	Glu .195	Tyr	Tyr	Val	His	Gln 200	Met :	Asp	Asn	Ala	G <u>l-</u> 205	Asp	Leu	Leu
30	Ser	Phe 210	Gly	Gly	Leu	Gln	Val 215	Val	Ile	Asn	Gly	Leu 220	Ast.	Ser	Tier	31:2
	Pro 225	Leu	Val	Lys	Glu	Tyr 230	Ala	Ala	Phe	Val	Leu 235	Gly	,Ala	Ala ,	Phe	Ser 240
35	Ser	Asn	Pro	Lys	Val 245	Gln	Val	Glu	Ala	Ile 250		Gly	Gly	Ala	1e: 255	315
	Lys	Leu	Leu	Val, 260	Ile	Leu	Ala	Thr	Glu 255	Gln	Pro	Leu	Thr	Ala 270	Lys	Lys
40	Lys	Val	Leu 275	Phe	Ala	Leu	Cys	Ser 280	Leu	Leu	Arg	His	Phe 285	Pro	Tyr	Ala
45	Gln	Arg 290	Gln	Phe	Leu	Lys	Leu 295	Gly	Gly	Leu	Gln	Val 300	Leu	æg		Leu
	Val 305	Gln	Glu	Lys	Gly	Thr 310	Glu	Val	Leu	Ala	Val 315	Arg	Val	Val	The	Læu 320
50	Leu	Tyr	Asp	Leu	Val 325	Thr	Glu	Lys	Met	Phe 330	Ala	Glu	Glu	Glu	<u>21</u> a 335	Glu
	Leu	Thr	Gln	Glu 340	Met	Ser	Pro	Glu	Lys 345	Leu	Gln	Gln	īàī	Arg 350	GLE.	Val
55	His	Leu	Leu 355	Pro :	Gly	Leu	Trp	Glu 360	Gln	Gly	Trp	Cys	Glu 365	Ile	Thr	Ala
60	His	Leu 370		Ala	Leu	Pro	Glu 375	His	qzA	Ala	Arg	Glu 380	Lys	Val	lei	Glin

```
Thr Leu Gly Val Leu Leu Thr Thr Cys Arg Arg Tyr Arg Gln Asp
                                        395
                     390
     Pro Gln Leu Gly Arg Thr Leu Ala Ser Leu Gln Ala Glu Tyr Gln Val
                 405 410 415
     Leu Ala Ser Leu Glu Leu Gln Asp Gly Glu Asp Glu Gly Tyr Phe Gln
                        . 425
     Glu Leu Leu Gly Ser Val Asm Sar Leu Leu Lys Glu Leu Arg Kaa
            435 1 443
-15
    (2) INFORMATION FOR SEQ ID NC: 394:
            (i) SEQUENCE CHAPACTEFLETICS:
                 (A) LENGTH: 24 amino acids
                  (B) TYPE: amino acid
20
                  (D) TOPOLOGY: limear
            (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 394:
     Met Val Ile Ser Tyr Val Thr Phe Thr Pro Val Ser Ala Asp Cys Phe
            . 5
25
     Phe Asn Val Leu Val Cys Phe Waa /
                20
30
     (2) INFORMATION FOR SEQ ID NO: 395:
            (i) SEQUENCE CHARACTERISTICS:
                 (A) LENGTH: 24 amino acids
35
                (E) TYPE: amino acid
                  (D) TOPOLOGY: linear
            (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 395:
      Glu Leu Leu Phe Leu Leu Ile Ile Ile Leu Gly Glu Ser Leu Ser Asp
40
      1 5
      Val Ile Leu Leu Ile Cys Phe Kaa
                 20
45
      (2) INFORMATION FOR SEQ ID NO: 396:
            (i) SEQUENCE CHARACTERISTICS:
 50
                  (A) LENGTH: 35 amino acids
                  (B) TYPE: amino acid
                  (D) TOPOLOGY: linear
            (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 396:
 55
      Met Phe Tyr Trp Gly Gly Leu Ser Phe Tyr Phe Leu Leu Ser Ser Gly
                                     10
      Val Gly Phe Tyr Cys Phe Leu Phe Gly Phe Gly Met Glu Ile Trp Ile
 60
```

Ala Ala Xaa 35 .

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(2) INFORMATION FOR SEQ ID NO: 397:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 3 amino acids
- (B) TYPE: amino acid
- (D) TOPOLOGY: linear
- (xi) SEQUENCE DESCRIPTION: SEO ID NO: 397:
- Gly Arg Kaa 15 1

- 20

40

- (2) INFORMATION FOR SEQ ID NO: 398:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 25 amino acids
 - (B) TYPE: amino acid
 - (D) TOPOLOGY: linear
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 398:

Met Lys Leu Ser Leu Leu Ile Leu Thr Leu Met Gln Arg Tyr Phe Arg 1 5 10 15

- 30 Thr Ile Thr Asn Ser Leu Cys Lys Xaa . 20 25
- 35 (2) INFORMATION FOR SEQ ID NO: 399:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 79 amino acids
 - (B) TYPE: amino acid
 - (D) TOPOLOGY: linear
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 399:

Met Pro Ala Val Ser Gly Pro Gly Pro Leu Phe Cys Leu Leu Leu $\frac{1}{5}$ $\frac{10}{15}$

Leu Leu Asp Pro His Ser Pro Glu Thr Gly Cys Pro Pro Leu Arg Arg 20 25 30

Phe Glu Tyr Lys Leu Ser Phe Lys Gly Pro Arg Leu Ala Leu Pro Gly

35 40 45

Ala Gly Ile Pro Phe Trp Ser His His Gly Gly Glu Gly Gln Gly Trp .50 55 60

- Gly Pro Leu Cys Pro Gly Ser Leu Lys Val Leu Glu Gly Leu Xaa 65 70 75
- 60 (2) INFORMATION FOR SEQ ID NO: 400:

			. (F (E	A) LE B) TY O) TO	INGT: (PE: (POL(i: 21 amir XGY:	L ami no ac line	ino a cid car	cids		.400	:			-	
1			Asp	5	Ser	Met	Pro	Phe	Leu 10	Val	Leu	Phe	Gln	Ser 15	Leu	
(2)	INFO	ORMAT		FOR	SEQ _.	ID N	: 10:4	01:								
			() (I	A) L: 3) T: 0) T:	ENGTI (PE : OPOL(H: 25 amin DGY:	57 ar no ac line	mino cid ear	acio		. 401	L:	3			
Met 1	Ala	Ala	Leu	Thr 5	Ser	His	Ľeu	Gln	Asn 10	Gln	Ser	Asn	Asn	Ser 15	Asn	
Trp	Asn	Leu	Arg 20	Thr	Arg	Ser	Lys	Cys 25	Lys	Lys	Asp	Val	Phe 30	Met	Pro	
Pro	Ser	Ser 35	Ser	Ser	Glu	Leu	Gln 40	Glu	Ser	Arg	Gly	Leu 45	Ser	Asn	Phe	
Thr	Ser 50	Thr	His	Leu	Leu	Leu 55	Lys	Glu	Asp	Glu	Gly 60	Val	Asp	Asp	Val	
Asn 65	Phe	Arg	Lys	Val	A <u>∽</u> g 70	Lys	Pro	Lys	Gly	Lys 75	Val	Thr	Ile	Leu	.80	
Gly	Ile	Pro	Ile	Lys 85	Lys	Thr	Lys	Lys	Gly 90	Cys	Arg	Lys	Ser	Cys 95	Ser	
Gly	Phe	Val	Xaa 100	Ser	Asp	Ser	Lys	Arg 105	Glu	Ser	Val	Cys	Asn 110	Lys	Ala	
Asp	Ala	Glu 115	Ser	Glu	Pro	Val	Ala 120	Gln	Lys	Ser	Gln	Leu 125	qzś	Arg	Thr	
Val	Cys 130		Ser	Asp	Ala	Gly 135	Ala	Cys	·Gly	Glu	Thr 140	Leu	Ser	Val	Thr	
Ser 145		Glu	Asn	Ser	Leu 150	Val	Lys	Lys	Lys	Glu 155	Arg	Ser	Leu	Ser	Ser 160	
Gly	Ser	Asn	Phe	Cys 165	Ser	Glu	Gln	Lys	Thr 170	Ser	Gly	Ile	Ile	Asn 175	Lys	
Phe	Cys	Ser	Ala 180	Lys	Asp	Ser	Glu	His 185	Asn	Glu	ŗàz	Tyr	Glu 190	Asp	Thr	
	1 Ile (2) (2) Met 1 Trp Pro Thr Asn 65 Gly Gly Asp Val Ser 145 Gly	Met Lys 1 Ile Gln (2) INFO (2) INFO (2) INFO (3) Met Ala 1 Trp Asn Pro Ser Thr Ser 50 Asn Phe 65 Gly Ile Gly Phe Asp Ala Val Cys 130 Ser Glu 145 Gly Ser	(xi) Met Lys Val 1 Ile Gln Glu (2) INFORMAT (i) S (xi) Met Ala Ala 1 Trp Asn Leu Pro Ser Ser 35 Thr Ser Thr 50 Asn Phe Arg 65 Gly Ile Pro Gly Phe Val Asp Ala Glu 115 Val Cys Ile 130 Ser Glu Glu 145 Gly Ser Asn	Met Lys Val Phe 1 Ile Gln Glu Asp 20 (2) INFORMATION (i) SEQUE (i) (xi) SEQUE (ii) (xi) SEQUE (iii) (xi) SEQUE (iiii) (xi) SEQUE (iiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiii	(A) LE (B) TY (D) TO (Xi) SEQUENCE Met Lys Val Phe Leu 1 5 Ile Gln Glu Asp Xaa 20 (2) INFORMATION FOR (i) SEQUENCE (A) LE (B) TY (D) TO (Xi) SEQUENCE (Xi) SEQUENCE (Xi) SEQUENCE (Xi) SEQUENCE (Xi) SEQUENCE (Xi) SEQUENCE (Xi) SEQUENCE (Xi) SEQUENCE (Xi) SEQUENC	(A) LENGT: (B) TYPE: (D) TOPOLO (Xi) SEQUENCE DES Met Lys Val Phe Leu Ser 1 5 Ile Gln Glu Asp Xaa 20 (2) INFORMATION FOR SEQ (i) SEQUENCE CHAR (A) LENGT: (B) TYPE: (D) TOPOLO (Xi) SEQUENCE DES Met Ala Ala Leu Thr Ser 1 5 Trp Asn Leu Arg Thr Arg 20 Pro Ser Ser Ser Ser Glu 35 Thr Ser Thr His Leu Leu 50 Asn Phe Arg Lys Val Arg 65 70 Gly Ile Pro Ile Lys Lys 85 Gly Phe Val Xaa Ser Asp 100 Asp Ala Glu Ser Glu Pro 115 Val Cys Ile Ser Asp Ala 130 Ser Glu Glu Asn Ser Leu 145 150 Gly Ser Asn Phe Cys Ser 165	(A) LENGTH: 2: (B) TYPE: amin (D) TOPOLOGY: (Xi) SEQUENCE DESCRIP Met Lys Val Phe Leu Ser Met 1	(A) LENGTH: 21 ami (B) TYPE: amino ac (D) TOPOLOGY: line (xi) SEQUENCE DESCRIPTION Met Lys Val Phe Leu Sar Met Pro 1 5 Ile Gln Glu Asp Xaa 20 (2) INFORMATION FOR SEQ ID NO: 4 (i) SEQUENCE CHARACTERIST (A) LENGTH: 257 amino ac (D) TOPOLOGY: line (xi) SEQUENCE DESCRIPTION Met Ala Ala Leu Thr Ser His Leu 1 5 Trp Asn Leu Arg Thr Arg Ser Lys 20 Pro Ser Ser Ser Ser Glu Leu Gln 35 40 Thr Ser Thr His Leu Leu Leu Lys 50 55 Asn Phe Arg Lys Val Arg Lys Pro 65 70 Gly Ile Pro Ile Lys Lys Thr Lys 85 Gly Phe Val Xaa Ser Asp Ser Lys 100 Asp Ala Glu Ser Glu Pro Val Ala 115 120 Val Cys Ile Ser Asp Ala Gly Ala 130 135 Ser Glu Glu Asn Ser Leu Val Lys 145 150 Gly Ser Asn Phe Cys Ser Glu Gln 165	(A) LENGTH: 21 amino acid (B) TYPE: amino acid (D) TOPOLOGY: linear (Xi) SEQUENCE DESCRIPTION: SE Met Lys Val Phe Leu Sar Met Pro Phe 1 5 Ile Gln Glu Asp Xaa 20 (2) INFORMATION FOR SEQ ID NO: 401: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 257 amino (B) TYPE: amino acid (D) TOPOLOGY: linear (Xi) SEQUENCE DESCRIPTION: SE Met Ala Ala Leu Thr Ser His Leu Gln 1 5 Trp Asn Leu Arg Thr Arg Ser Lys Cys 20 25 Pro Ser Ser Ser Ser Glu Leu Gln Glu 35 40 Thr Ser Thr His Leu Leu Leu Lys Glu 50 55 Asn Phe Arg Lys Val Arg Lys Pro Lys 65 70 Gly Ile Pro Ile Lys Lys Thr Lys Lys 85 Gly Phe Val Xaa Ser Asp Ser Lys Arg 100 105 Asp Ala Glu Ser Glu Pro Val Ala Gln 115 120 Val Cys Ile Ser Asp Ala Gly Ala Cys 130 Ser Glu Glu Asn Ser Leu Val Lys Lys 145 Cly Ser Asn Phe Cys Ser Glu Gln Lys 165 Phe Cys Ser Ala Lys Asp Ser Glu His	(3) TYPE: amino acid (D) TOPOLOGY: linear (Xi) SEQUENCE DESCRIFTION: SEQ ID Met Lys Val Phe Leu Sar Met Pro Phe Leu 1 5 10 Ile Gln Glu Asp Xaa 20 (2) INFORMATION FOR SEQ ID NO: 401: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 257 amino acid (B) TYPE: amino acid (D) TOPOLOGY: linear (Xi) SEQUENCE DESCRIPTION: SEQ II Met Ala Ala Leu Thr Ser His Leu Gln Asn 1 5 10 Trp Asn Leu Arg Thr Arg Ser Lys Cys Lys 20 25 Pro Ser Ser Ser Ser Glu Leu Gln Glu Ser 35 40 Thr Ser Thr His Leu Leu Leu Lys Glu Asp 50 55 Asn Phe Arg Lys Val Arg Lys Pro Lys Gly 65 70 Gly Ile Pro Ile Lys Lys Thr Lys Lys Gly 85 90 Gly Phe Val Xaa Ser Asp Ser Lys Arg Glu 100 105 Asp Ala Glu Ser Glu Pro Val Ala Gln Lys 115 120 Val Cys Ile Ser Asp Ala Gly Ala Cys Gly 130 135 Ser Glu Glu Asn Ser Leu Val Lys Lys Lys 145 150 Gly Ser Asn Phe Cys Ser Glu Gln Lys Thr 165 170 Phe Cys Ser Ala Lys Asp Ser Glu His Asn	(A) LENGTH: 21 amino acids (3) TYPE: amino acids (D) TOPOLOGY: linear (xi) SEQUENCE DESCRIPTION: SEQ ID NO: Met Lys Val Phe Leu Sar Met Pro Phe Leu Val 1 5 10 Ile Gln Glu Asp Xaa 20 (2) INFORMATION FOR SEQ ID NO: 401: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 257 amino acids (B) TYPE: amino acid (D) TOPOLOGY: linear (xi) SEQUENCE DESCRIPTION: SEQ ID NO: Met Ala Ala Leu Thr Ser His Leu Gln Asn Gln 1 5 10 Trp Asn Leu Arg Thr Arg Ser Lys Cys Lys Lys 20 25 Pro Ser Ser Ser Ser Glu Leu Gln Glu Ser Arg 35 40 Thr Ser Thr His Leu Leu Leu Lys Glu Asp Glu 50 55 Asn Phe Arg Lys Val Arg Lys Pro Lys Gly Lys 65 70 75 Gly Ile Pro Ile Lys Lys Thr Lys Lys Gly Cys 85 90 Gly Phe Val Xaa Ser Asp Ser Lys Arg Glu Ser 100 105 Asp Ala Glu Ser Glu Pro Val Ala Gln Lys Ser 115 120 Val Cys Ile Ser Asp Ala Gly Ala Cys Gly Glu 130 135 Ser Glu Glu Asn Ser Leu Val Lys Lys Lys Glu 145 150 155 Gly Ser Asn Phe Cys Ser Glu Gln Lys Thr Ser 165 170 Phe Cys Ser Ala Lys Asp Ser Glu His Asn Glu	(A) LENGTH: 21 amino acids (B) TYPE: amino acid (D) TOPOLOGY: linear (Xi) SEQUENCE DESCRIPTION: SEQ ID NO: 400 Met Lys Val Phe Leu Ser Met Pro Phe Leu Val Leu 1 5 10 Ile Gln Glu Asp Xaa 20 (2) INFORMATION FOR SEQ ID NO: 401: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 257 amino acids (B) TYPE: amino acid (D) TOPOLOGY: linear (Xi) SEQUENCE DESCRIPTION: SEQ ID NO: 401 Met Ala Ala Leu Thr Ser His Leu Gln Asn Gln Ser 1 5 10 Trp Asn Leu Arg Thr Arg Ser Lys Cys Lys Lys Asp 20 25 Pro Ser Ser Ser Ser Glu Leu Gln Glu Ser Arg Gly 35 40 Thr Ser Thr His Leu Leu Leu Lys Glu Asp Glu Gly 50 55 60 Asn Phe Arg Lys Val Arg Lys Pro Lys Gly Lys Val 65 70 75 Gly Ile Pro Ile Lys Lys Thr Lys Lys Gly Cys Arg 85 90 Gly Phe Val Xaa Ser Asp Ser Lys Arg Glu Ser Val 100 105 Asp Ala Glu Ser Glu Pro Val Ala Gln Lys Ser Gln 115 120 Val Cys Ile Ser Asp Ala Gly Ala Cys Gly Glu Thr 130 135 140 Ser Glu Glu Asn Ser Leu Val Lys Lys Lys Glu Arg 145 150 155 Gly Ser Asn Phe Cys Ser Glu Gln Lys Thr Ser Gly 165 170 Phe Cys Ser Ala Lys Asp Ser Glu His Asn Glu Lys	(A) LENGTH: 21 amino acids (B) TYPE: amino acids (C) TYPE: amino acids (D) TOPOLOGY: linear (Xi) SEQUENCE DESCRIPTION: SEQ ID NO: 400: Met Lys Val Phe Leu Sar Met Pro Phe Leu Val Leu Phe 1 5 10 Ile Gln Glu Asp Xaa 20 (2) INFORMATION FOR SEQ ID NO: 401: (i) SEQUENCE CHARACTERISTICS: (A) LENGTE: 257 amino acids (B) TYPE: amino 'acids (D) TOPOLOGY: linear (Xi) SEQUENCE DESCRIPTION: SEQ ID NO: 401: Met Ala Ala Leu Thr Ser His Leu Gln Asn Gln Ser Asn 1 5 10 Trp Asn Leu Arg Thr Arg Ser Lys Cys Lys Lys Asp Val 20 25 Pro Ser Ser Ser Ser Glu Leu Gln Glu Ser Arg Gly Leu 35 40 45 Thr Ser Thr His Leu Leu Leu Lys Glu Asp Glu Gly Val 50 55 60 Asn Phe Arg Lys Val Arg Lys Pro Lys Gly Lys Val Thr 65 70 75 Gly Ile Pro Ile Lys Lys Thr Lys Lys Gly Cys Arg Lys 85 90 Gly Phe Val Xaa Ser Asp Ser Lys Arg Glu Ser Val Cys 100 105 Asp Ala Glu Ser Glu Pro Val Ala Gln Lys Ser Gln Leu 115 120 125 Val Cys Ile Ser Asp Ala Gly Ala Cys Gly Glu Thr Leu 130 135 140 Sar Glu Glu Asn Ser Leu Val Lys Lys Lys Glu Arg Ser 145 150 155 Gly Ser Asn Phe Cys Ser Glu Gln Lys Thr Ser Gly Ile 165 170 Phe Cys Ser Ala Lys Asp Ser Glu His Asn Glu Lys Tyr	(A) LENGTH: 21 amino acids (B) TYPE: amino acid (D) TOPOLOGY: linear (XI) SEQUENCE DESCRIPTION: SEQ ID NO: 400: Met Lys Val Phe Leu Ser Met Pro Phe Leu Val Leu Phe Gln 1 5 10 Ile Gln Glu Asp Xaa 20 (2) INFORMATION FOR SEQ ID NO: 401: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 257 amino acids (B) TYPE: amino acid (D) TOPOLOGY: linear (XXI) SEQUENCE DESCRIPTION: SEQ ID NO: 401: Met Ala Ala Leu Thr Ser His Leu Gln Asn Gln Ser Asn Asn 1 5 10 Trp Asn Leu Arg Thr Arg Ser Lys Cys Lys Lys Asp Val Phe 20 25 30 Pro Ser Ser Ser Ser Glu Leu Gln Glu Ser Arg Gly Leu Ser 35 40 45 Thr Ser Thr His Leu Leu Leu Lys Glu Asp Glu Gly Val Asp 50 55 60 Asn Phe Arg Lys Val Arg Lys Pro Lys Gly Lys Val Thr Ile 65 70 75 Gly Phe Val Xaa Ser Asp Ser Lys Arg Glu Ser Val Cys Asn 100 105 Gly Phe Val Xaa Ser Asp Ser Lys Arg Glu Ser Val Cys Asn 100 105 Asp Ala Glu Ser Glu Pro Val Ala Gln Lys Ser Gln Leu Asp 115 120 Val Cys Ile Ser Asp Ala Gly Ala Cys Gly Glu Thr Leu Ser 130 135 Ser Glu Glu Asn Ser Leu Val Lys Lys Lys Glu Arg Ser Leu 130 135 Gly Ser Asn Phe Cys Ser Glu Gln Lys Thr Ser Gly Ile Ile 165 170 Phe Cys Ser Ala Lys Asp Ser Glu His Asn Glu Lys Tyr Glu	(A) LENGTH: 21 amino acids (B) TYPE: amino acids (D) TOPOLOGY linear (Xi) SEQUENCE DESCRIPTION: SEQ ID NO: 400: Met Lys Val Phe Leu Ser Met Pro Phe Leu Val Leu Phe Gln Ser 1 5 10 15 Ile Gln Glu Asp Xaa 20 (2) INFORMATION FOR SEQ ID NO: 401: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 257 amino acids (B) TYPE: amino acid (D) TOPOLOGY: linear (Xi) SEQUENCE DESCRIPTION: SEQ ID NO: 401: Met Ala Ala Leu Thr Ser His Leu Gln Asm Gln Ser Asm Asm Ser 1 5 10 15 Trp Asm Leu Arg Thr Arg Ser Lys Cys Lys Lys Asp Val Phe Met 20 25 30 Pro Ser Ser Ser Ser Glu Leu Gln Glu Ser Arg Gly Leu Ser Asm 35 40 45 Thr Ser Thr His Leu Leu Leu Lys Glu Asp Glu Gly Val Asp Asp 50 55 60 Asm Phe Arg Lys Val Arg Lys Pro Lys Gly Lys Val Thr Ile Leu 65 70 75 Gly Ile Pro Ile Lys Lys Thr Lys Lys Gly Cys Arg Lys Ser Cys 85 90 95 Gly Phe Val Xaa Ser Asp Ser Lys Arg Glu Ser Val Cys Asm Lys 100 105 110 Asp Ala Glu Ser Glu Pro Val Ala Gln Lys Ser Gln Leu Asp Arg 115 120 125 Val Cys Ile Ser Asp Ala Gly Ala Cys Gly Glu Thr Leu Ser Val 130 135 140 Ser Glu Glu Asm Ser Leu Val Lys Lys Lys Glu Arg Ser Leu Ser 145 150 155 Gly Ser Asn Phe Cys Ser Glu Gln Lys Thr Ser Gly Ile Ile Asm 165 170 175 Phe Cys Ser Ala Lys Asp Ser Glu His Asm Glu Lys Tyr Glu Asp	(A) LENGTH: 21 amino acids (B) TYPE: amino acid (D) TOPOLOCY: linear (Xi) SEQUENCE DESCRIPTION: SEQ ID NO: 400: Met Lys Val Phe Leu Ser Met Pro Phe Leu Val Leu Phe Gln Ser Leu 1 5 10 15 Ile Gln Glu Asp Xaa 20 (2) INFORMATION FOR SEQ ID NO: 401: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 257 amino acids (B) TYPE: amino acid (D) TOPOLOCY: linear (Xi) SEQUENCE DESCRIPTION: SEQ ID NO: 401: Met Ala Ala Leu Thr Ser His Leu Gln Asn Gln Ser Asn Asn Ser Asn 1 5 10 15 Trp Asn Leu Arg Thr Arg Ser Lys Cys Lys Lys Asp Val Phe Met Pro 20 25 30 Pro Ser Ser Ser Ser Glu Leu Gln Glu Ser Arg Gly Leu Ser Asn Phe 35 40 45 Thr Ser Thr His Leu Leu Leu Lys Glu Asp Glu Gly Val Asp Asp Val 50 55 60 Asn Phe Arg Lys Val Arg Lys Pro Lys Gly Lys Val Thr Ile Leu Lys 65 70 70 80 Gly Ile Pro Ile Lys Lys Thr Lys Lys Gly Cys Arg Lys Ser Cys Ser 85 90 95 Gly Phe Val Xaa Ser Asp Ser Lys Arg Glu Ser Val Cys Asn Lys Ala 100 105 110 Asp Ala Glu Ser Glu Pro Val Ala Gln Lys Ser Gln Leu Asp Arg Thr 115 120 125 Val Cys Ile Ser Asp Ala Gly Ala Cys Gly Glu Thr Leu Ser Val Thr 110 135 140 Ser Glu Glu Asn Ser Leu Val Lys Lys Lys Glu Arg Ser Leu Ser Ser 145 150 155 160 Gly Ser Asn Phe Cys Ser Glu Gln Lys Thr Ser Gly Ile Ile Asn Lys 165 170 175 Phe Cys Ser Ala Lys Asp Ser Glu His Asn Glu Lys Tyr Glu Asp Thr

Phe Leu Glu Ser Glu Glu Ile Gly Thr Lys Val Glu Val Val Glu Arg

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•		195	}				200	ı				205								
5	Lys G	lu His 10	: Leu	His	Thr	Asp 215		Leu	. Lys	Arg	Gly 220		Glu	Met	: Asp					
; ·	Asn A 225	sn Cys	: Ser	Pro	Thr 230		Lys	qz4	Phe	Thr 235		qzA	Thr	Ile	Pro 240				•	
10	Arg A	sn Thr	Asp	Arg 245		Lys	Glu	Asn	Lys 250		Val	Phe	Phe	Gln 255		•	•			,
	Ile								٠											
15							:													
	(2) II	JFORMA	TION	FOR	SEQ	ID I	NO:	402:		• •		•								
20			(A) L B) T D) T	.ENGI 'YPE : 'OPOL	H: 4 ami .CGY:	24 a no a lin	mino cid´ ear	aci											
25			SEQ						_											
-	Met G	lu Lys	Gln	Cys 5	Cňa	Ser	His		Val 10	Ile	Cys	Şer	Leu	Ser 15						•
30	Met T	r Thr	Phe 20	Leu	Leu	Gly	Ala	Ile 25	Phe	Ile	Ala	Leu	Ser 30	Ser	Ser		-			
	Arg Il	le Leu 35		Val	Lys	Tyr	Ser 40	Ala	Asn	Glu	Glu	Asn 45	Lys ,	Tyr	qzA.					
35	Tyr Le	eu Pro 50	Thr	Thr	Val	Asn 55	Val	Cys	Ser	Glu	Leu 60	Val	Lys	Leu	Val					
	Phe Cy 65	/s-Val	Ļeu	Val	Seż 70	Phe	Cys	Val	Ile	Lys 75	Lys	Asp	His	Gln	Ser 80					
40	Arg As	n Leu	Lys	Ту± 85	Ala	Ser	Trp	Lys	Glu 90	Phe	Ser	qeA	Phe	Met 95	Lys					
45	Trp Se	r Ile	Pro 100		Phe	Leu	ŢŸŦ	Phe 105	Leu	Asp	Aśn	Leu	Ile 110	Val	Phe					
	Tyr Va	l Leu 115		TYT	Leu	Gln	Pro 120	Ala	Met	Ala	Val	Ile 125	Phe	Ser	Asn	,				
50	Phe Se		Ile	Thr	Thr	Ala 135	Leu	Leu	Phe	Arg	Ile 140	Val	Leu	Lys	Xaa	•		-		
	Arg Le 145	eu Asn	Trp	Ile	Gļn 150	Trp	Ala	Ser	Leu	Leu 155	Thr	Leu	Phe	Leu	Ser 160			_		
55	Ile Va	l Ala	Leu	Thr 165	Ala	Gly	Thr	Lys	Thr 170	Leu	Gln	His	Asn	Leu 175	Ala					
60	Gly Ar	g Gly	Phe 130	His	His	Asp	Àla	Phe 135	Phe	Ser	Pro	Ser	Asn 190	Ser	C∧z.			-	:	 1 :

•	Leu	Leu	Phe 195	Arg	Asn	Glu	Càr	Pro 200	Arg	Lys	Asp	Asn	Cys 205	Thr	Ala	Lys
5	Glu	Trp 210	Thr	Phe	Pro	Glu	Ala 215	Lys	Trp	Asn	Thr	Thr 220	Ala	Arg	Val	Phe
	Ser 225	His	Ile	Arg	Leu	Gly 230	Met	Gly	His		Leu 235	Ile	Ile	Val	Gln	Cys 240
10	Phe	Ile	Ser	Ser	Met 245	Ala	Asn	Ile	Tyr	Asn 250	Glu	Lys	Ile	Leu	Lys 255	Glu,
15	Gly	Asn	Gln	Leu 260	Thr	Glu	Xaa	Ile	Phe 265	Ile	Gln	Asn	Ser	Lys 270	Fen	Tyr
	Phe	Phe	Gly 275	Ile	Leu	Phe	Asņ	Gly 280	Leu	Thr	Leu	Gly	Leu 285	Gln	Arg	Ser
20	Asn	Arg 290	Asp	Gln	Ile	Lys	Asn 295	Cys	Gly	Phe	Phe	Tyr 300	Gly	His	Ser	Ala
	Phe 305	Ser	Val	Ala	Leu	Ile 310	Phe	Val	Thr	Ala	Phe 315	Gln	Gly	Leu	Ser	Val 320
25	Ala	Phe	Ile	Leu	Lys 325	Phe	Leu	Asp		Met 330	Phe	His	Val	Leu	Met 335	Ala
30				Th:: 340					345				٠.	350		•
			355	Ser				360	,		•		365			
35	Ser	Ile 370	Phe	Ile	Tyr	Asī.	Ala 375	Ser	Lys	Pro	Gln	Val 380	Pro	Glu	îAr	Ala
	Pro 385	Arg :	Gln	Glu	Arg	Ile 390	A≖g	Asp	Leu	Ser	Gly 395	Asn	Leu	Trp	Glu	Arg 400
40	Ser	Ser	Gly	Asp	Gly 405		Glu	Leu	Glu	Arg 410	Leu	Thr	Lys	Pro	Lys 415	Ser
45	qzA	Glu	Ser	Asp 420	Glu	Asp	Thr	Phe	-	÷						
50	(2)			rion											•	
50			(1)	(ENCE A) L B) T D) T	ENGT YPE :	H: 3 ami	3 am no a	ino cid		s					
55				SEQ												
	Met 1	<u>dr</u> p	Gly	Gln	Gly 5	Ser	Gln	Lys	Ser	His 10	Phe	Ser	Asp	Leu	Va <u>l</u> 15	Phe
60	Gly	Val	Arg	Glu 20	Leu	Cys	Ala	Gln	Pro 25	Ser	Asp	Pro	Gly	Ser 30	Pro	His

Xaa

5

(2) INFORMATION FOR SEQ ID NO: 404:

(i) SEQUENCE CHARACTERISTICS: 10

(A) LENGTH: 80 amino acids

- (B) TYPE: amino acid
- (D) TOPOLOGY: linear
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 404:
- 15 Met Val Gln His Ile Gln Pro Ala Ala Leu Ser Leu Leu Ala Gln Trp

Ser Thr Leu Val Gln Glu Leu Glu Ala Ala Leu Gln Leu Ala Phe Tyr

20

Pro Asp Ala Val Glu Glu Trp Leu Glu Glu Asn Val His Pro Ser Leu

Gln Arg Leu Gln Xaa Leu Leu Gln Asp Leu Ser Glu Val Ser Ala Pro 25

Pro Leu Pro Pro Thr Ser Pro Gly Arg Asp Val Ala Gln Asp Pro Xaa 70-75

- 35 (2) INFORMATION FOR SEQ ID NO: 405:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 95 amino acids
 - (B) TYPE: amino acid
- 40 (D) TOPOLOGY: linear
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 405:

Met Leu Asn Gln Gly Tyr Ile Arg Lys Ile Ile Leu Ile Ile Ile Leu 10

45

Gly Ser Phe Ser Ser Pro Lys Lys Ala Ile Leu Met Gly Phe Gln Asn

Gln Lys Lys Ala Leu Asn Glu Glu Gln Thr Thr Gly Val Pro Met Ser 50

Ile Ser Gly Lys Leu Arg. Pro Ser Arg Ser Leu Asp Phe Val Gln Pro

55 Pro Arg Phe Gln Ser Gln Gln Pro Ser Ala Val Val Asp Arg Arg Gly

Phe Xaa Xaa Lys Ala Ala Arg Gly Gln Glu Phe Ser Glu Ser Xaa

	(2)	INF	ORMA	TION	FOR	SEQ	ID	NO:	406 :							
			(i)	((A) I (B) T	ENGT	H: 2 ami	ERIS 257 a .no a lin	mino cid		.ds					
10			(xi)					PTIO		EQ I	D NO	: 40	6 :			
	Met 1		Gly	Pro	Ala 5	Gln	Ala	Lys	Leu	Leu 10	Pro	Gly	Ser	Ala	Ile 15	Gln
15	Ala	Leu	<u>V</u> al	Gly 20		Ala	Arg	Pro :	Leu 25	Val	Leu	Ala	Leu	Leu 30	Leu	Val
	Ser	Ala	Ala 35	Leu	·Ser	Ser	Val	Val 40	Ser	Arg	Thr	Asp	Ser 45	Pro	Ser	Pro
20	Thr	Val 50	Leu	Asn	Ser	His	Ile 55	Ser	Thr	Pro	Asn	Val 60	Asn	Ala	Leu	Thr
25	His 65	Glu	Asn	Gln	Thr	Lys 70	Pro	Ser	Ile	Ser	Gln 75	Ile	Ser	Thr	Thr	Leu 80
	Pro	Pro	Thr	Thr	Ser 85	Thr	Lys	Lys	Ser	Gly 90	Gly	Ala	Ser	Val	Val 95	Pro
30	His	Pro	Ser	Pro 100	Thr	Pro	Leu	Ser	Gln 105	Glu	Glu	Ala	Asp	Asn 110	Asn	Glu
	Asp	Pro	Ser 115	Ile	Glu	Glu	Glu	Asp 120	Leu	Leu	Met	Leu	Asn 125	Ser	Ser	Pro
35	Ser	Thr 130	Ala	Lys	Asp		Leu 135	Asp	Àsn	Gly	Asp	Tyr 140	Gly	Glu	Pro	Asp
40	Tyr 145	Asp	Trp	Thr	Thr	Gly 150	Pro	Arg	.Asp	Asp	Asp 155	Glu	Ser	Asp	Asp	Thr 160
	Leu	Glu	Glu	Asn	Arg 165	Gly	Tyr		Glu . ·	Ile 170	Glu	Gln	Ser	Val	Lys 175	Ser
45	Phe	Lys	Met	Pro 130	Ser	Ser	Ásn	Ile	Glu 185	Glu	Glu	Asp	Ser	His 190	Phe	Phe
	Phe	His	Leu 195	Ile	İle	Phe	Ala	Phe 200	Cys	Ile	Ala	Val	Val 205	Tyr	Ile	Thr
50	Tyr	His 210	Asn	Lys	Arg	Lys	Ile 215	Phe	Leu	Leu	Val	Gln 220	Ser	Arg	Lys	Trp
55	Arg 225	Asp	Gly	Leu	Cys	Ser 230	Lys	Thr	Val	Glu	Tyr 235	His	Arg	Leu	qzA	Gln 240
	Asn	Val	Asn	Glu	Ala 245	Met	Pro	Ser	Leu	Lys 250	Ile	Thr	Asn	qz.K	Tyr 255	Ile

Phe 60

				260					255					270		
5	Val	Ser	Leu 275	ŗ'ns	Glu	Ser	Asp	Arg 230	His	Thr	Leu	Г е п	His 285	Phe	Leu	Glu
-	Asp	Glu 290		Tγz	Glu	Glu	Val 295	Met	Ala	Val	Leu	300 Gly	Ser	Phe	Pro	ŢŸŢ
10	Val 305	Thr	Met	Asp	Ile	Lys 310	Ser	Gln	Val	Leu	Asp 315	Asp	Glu	qzA	Ser	Asn 320
	Asn	Ile	Thr	Val	Gly 325	Ser	Leu	Val	Thr	Val 330	Leu	Val	Lys	Leu	Thr 335	Arg
15	Gln	Thr	Met	Ala 340	Glu	Val	Phe	Glu	Lys 345	Glu	Gln	Ser	Ile	Cys 350	Ala	Ala
20	Glu	Glu	Gln 355	Pro	Ala	Glu	Asp	Gly 360	Gln	Gly	Glu	Thr	Asn 365	Lys	Asn	Arg
	Thr	Lys 370	Gly	Gly	Trp	Gln	Gln 375	Lys	Ser	Ļys	Gly	PT0 380	Lys	Lys	Thr	Ala
25	385		-	-		390		Leu	:		395		•			400
	Leu				405					410		• .			415	•
30				420				Glu	425					430		
35	.Gly		435					440					445			
		450		•			455.	Asp				460	•			
40	465					470		Glu			475					480
45		٠			485			Leu		490			. <i>•</i>		495	
72				500				Pro	505					510		•
50		-	515		•	•	•	520	-				525			
		530					535	Thr				540				
55	545	•		_	:	550		īĀī			555					560
60					565			Gln		570		•			575	
UU	- Fae	Mec	A ~~~	Ĩ.=11	TAVE	220	Val	P~O	(7111	ASD	E15	PT0	Gin	T.T.	A 50	77.77

5	(2)	TWE	Jema:	LTON	FOR	SEQ	ו עד	NO: 4	107:							
5 .			(i)	(.	A) L	ENGT	FACT H: 6	23 a	mino		ds					
10			(xi)	(D) T	OPOL	OGY: SCRI	lin	ear	EQ II	D NO	: 40	7 :			
	Met 1	Phe	Met	Arg	Ile 5	Ala	Lys	Ala	TYT	Ala 10	Ala	Leu	Thr	qzA	Glu 15	Glu
15	Ser	Arg	Lys	Asn 20	Trp	Glu	Glu	Phe	Gly 25	Asn	Pro	Asp	Gly	Pro 30	Gln	Ala
20	Thr	Ser	Phe 35	GĴY	Ile	Ala	Leu	Pro 40	Ala	Trp	Ile	Val	Asp 45	Gln.	Lys	Asn
	Ser	Ile 50	Leu	Val	Leu	Leu	Val 55	Tyr	Gly	Leu	Ala	Phe 60	Met	Val	Ile	Leu
25	Pro 65	Val	Val	Val	Gly	Ser 70	Trp	Trp	Tyr	Arg	Ser 75	Ile	Arg	īĀī	Ser	Gly 80
	Asp	Gln	Ile	Leu	Ile 85	Arg	Thr	Thr	Gln	Ile 90	Tyr	Thr	Tyr	Phe	Val 95	Tyr
30	Lys	Thr	Arg	Asn 100	Met	Asp	Mec	Lys	Arg 105	Leu	Ile	Met	Val	Leu 110	Xaa	Gly
35	Ala	Ser	Glu 115	Phe	Asp	ЪžО	Gln	Tyr 120	Asn	Lys	Asp	Ala	Thr 125	Ser	Arg	Pro
	Thr	Asp 130	Asn	Ile	Leu	Ile	Pro 135	Gln	Leu	Ile	Arg	Glu 140	Ile	Gly	Ser	Ile
40	Asn 145	Leu	Lys	Lys	Asn	Glu 150	Pro	Pro	Leu	Thr	Cys 155	Pro	Tyr	Ser	Leu	Lys 160
	Ala	Arg	Val	Leu	Leu 165	Leu	Ser	His	Lėu	Ala 170	Arg	Met	Lys	Ile	Pro 175	Glu
45	Thr	Leu	Glu	Glu 180	Asp	Gln	Gln	Phe	Met 185	Leu	Ľvs	Lys	Cvs	Pro 190	Ala	Leu
50	Leu	Gln	Glu 195	Met	Val	Asn	Val	Ile 200	Cys	Gln	Leu	Ile	Val 205	Met	Ala	Arg
50	Asn	Arg 210	Glu	Glu	Arg	Glu	Phe 215	Arg	Ala	Pro	Thr	Leu 220	Ala	Ser	Leu	Glu
55	Asn 225	Ċys	Met	Lys	Leu	Ser 230	Gln	Met	Ala	Val	Gln 235	Gly	Leu	Gln	Gln	Phe 240
	Lys	Ser	Pro	Leu	Leu 245	Gln	Leu	Pro	His	Ile 250	Glu	Glu	Asp	Asn	Leu 255	Arg
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	5	Ala	Ile	Glu 595	Gly	Asp	Glu	qaA	Gln 600	Glu	Asp	Ser	Glu	Gly 605	Phe	Glu	Asp
	3	Ser	Phe 610	Glu [.]	Gly	Gly	Arg	Gly 615	Arg	Glu	Glu	Gly	A≍g 620	dab	grT.	The	
	10	(2)	INFO	RMAT	NOI	FOR	SEQ	ID 1	JO: 4	: 80	•						
	15				() ()	A) LI B) T D) T	engt: YPE : OPOL	H: 1 ami CGY:	ERISTO AND AND AND AND AND AND AND AND AND AND	mino cid ear	aci	٠	: 40	8:	٠		
	20	Met 1	Lys	Ala	Ser	Gln 5	Cys	Cys	Cys	Cys	Leu 10	Ser	His	Leu	Leu	Ala 15	Ser
		Val	Leu	Leu	Leu 20	Leu	Leu	Leu	'Pro	Glu 25	Leu	Ser	Gly	Xaa	Leu 30	Xaa	Val
	25	Leu	Leu	Gln 35	Ala	Ala	Glu	Ala	Ala 40	Pro	Gly	Leu ,	Gly	Pro 45	Pro	qeA	Pro
-	, 30	Arg	Pro 50	Arg	Thr	Leu	Pro	P≭0 55	Leu	Pro	Pro	Gly	Pro 60	Thr	Pro	Ala	Gln
	50	Gln 65		Gly	Arg	Gly	Leu 70	Ala	Glu	Ala	Ala	Gly 75	Pro	Arg	Gly	Ser	Glu 80
	35.	Gly	Gly	Asn	Gly	Ser 85	Asn	Pro	Val	Ala	Gly 90	Leu	Glu	Thr	Asp	Asp 95	
		´Gly	·Gly	Lys	Ala 100		Glu	G1y	Ser	Val 105		Gly	Gly	Leu	Ala 110		Ser
.*2	40	Pro	Asn	Pro 115		Asp	Lys	Pro	Met 120		Gla	Arg	Ala	Leu 125		Val	Leu
	45	Met	: Val		Ser	Gly	Ala	Val 135	Leu	. Val	Tyr	Phe	Val 140		Arg	Thr	Val
		Arg 145		Arg	Arg	Arg	Asn 150		Lys	Thr	Arg	Arg 155		Gly	Val	. Leu	1 Asp 150
-	50	Thr	Asn	Ile	: Glu	Asn 165		Glu	Leu	Thr	Pro 170		Glu	ı Gln	Asp	175	
		Asr	Asī	Asp	Asn 180		Leu	. Phe	e Asp	Ala 185		. His	Pro	Arg	7 A <u>rg</u> 190		
	55					:											
		(2)	INE	ORMA	TION	1 FOF	SEÇ	Q ID	NO:	409:							

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 179 amino acids

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5	Met	Ser	210	Ser	Gl.	223	ŗen	C73	je:	Zeu	Thr	Ile	Val	Gly	Leu	Ile
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	PEQ			ترجية.	V=_	G	1:	ÿ	375	GIN	Inr	Leu		510	Ser	Gly
			115					120					125			
	Phe	His	Glu	وعد	Ast	320	Pha	Pie	772	Asp	Glu	His	The	Leu	ನಿಶ್ವರ	Lvs
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(2) EMFORMATION FOR SEQ ID NO: 411:

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(i) FEQUENCE CHARACTERISTICS:

(A) LENGTH: 232 amino acids
(B) TOPE: amino acid

(D) TOPOLOGY: linear (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 411:

Met Leu Ala Gly Lys Leu Ile Pro Val His Gln Val Arg Gly Leu Lys Glu Lys Ile Val Arg Ser Phe Glu Val Ser Pro Asp Gly Ser Phe Leu 10 Leu Ile Asn Gly Ile Ala Gly Tyr Leu His Leu Leu Ala Met Lys Thr Lys Glu Leu Ile Gly Ser Met Lys Ile Asn Gly Arg Val Ala Ala Ser 15 Thr Phe Ser Ser Asp Ser Lys Lys Val Tyr Ala Ser Ser Gly Asp Gly Glu Val Tyr Val Trp Asp Val Asn Ser Arg Lys Cys Leu Asn Arg Phe 20 Val Asp Glu Gly Ser Leu Tyr Gly Leu Ser Ile Ala Thr Ser Arg Asn 100 105 25 Gly Gln Tyr Val Ala Cys Gly Ser Asn Cys Gly Val Val Asn Ile Tyr 115 125 Asn Gln Asp Ser Cys Leu Gln Glu Thr Asn Pro Lys Pro Ile Lys Ala 135 140 30 Ile Met Asn Leu Val Thr Gly Val Thr Ser Leu Thr Phe Asn Pro Thr 155 Thr Glu Ile Leu Ala Ile Ala Ser Glu Lys Met Lys Glu Ala Val Arg 35. 170 Leu Val His Leu Pro Ser Cys Thr Val Phe Ser Asn Phe Pro Val Ile 180 185 190 40 Lys Asn Lys Asn Ile Ser His Val His Thr Met Asp Phe Ser Pro Arg 200 Ser Gly Tyr Phe Ala Leu Gly Asn Glu Lys Gly Lys Ala Leu Met Tyr 210 215 45 Arg Leu His His Tyr Ser Asp Phe 230 (2) INFORMATION FOR SEQ ID NO: 412:

50

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 54 amino acids
 - (B) TYPE: amino acid
 - (D) TOPOLOGY: linear
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 412:
- Ile Leu Leu Cys Ser Trp Pro Thr Gly Leu Val Gly Gly Arg Asp Pro 60 10

Gly Ser Ser Arg Gly Ser Ser Ala Ser Leu Thr Pro Ser Pro Gly Arg 20 25 Gln Pro Cys Ser Arg Arg Arg Gly Tyr Ser Val Gly Arg Arg Ser Ser 40 Pro Pro Asp Gly Ser Kaa . 50 10 (2) INFORMATION FOR SEQ ID NO: 413: 15 (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 33 amino acids (B) TYPE: amino acid (D) TOPOLOGY: linear (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 413: 20 Met Ser Leu Gln Ser Asn Ala Trp Ser Lys Xaa Leu Phe Ile Val Phe Leu Phe Leu Arg Val Leu Phe Lys Thr Gly Val Ser Ser Glu Glu Ser 25 20 25 Xaa 30 -(2) INFORMATION FOR SEQ ID NO: 414: (i) SEQUENCE CHARACTERISTICS: 35 (A) LENGTH: 219 amino acids (B) TYPE: amino acid (D) TOPOLOGY: linear (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 414: 40 Met Ala Val Val Leu Leu Ala Asn Leu Ala Gln Gly Asp Ser Leu Ala 5 . Ala Arg Ala Ile Ala Val Gln Lys Gly Ser Ile Gly Asn Leu Leu Gly 45 Phe Leu Glu Asp Ser Leu Ala Ala Thr Gln Phe Gln Gln Ser Gln Ala Ser Leu Leu His Met Gln Asn Pro Pro Phe Glu Pro Xaa Ser Val Asp 50 50 55 Met Met Arg Arg Ala Ala Arg Ala Leu Leu Ala Leu Ala Lys Val Asp 70 55 Glu Asn His Ser Glu Phe Thr Leu Tyr Glu Ser Arg Leu Leu Asp Ile 25 90 Ser Val Ser Pro Leu Met Asn Ser Xaa Val Ser Gln Val Ile Cys Asp 100 105 60

	Val	Leu	Phe 115		Xaa	Trp	Pro	Val 120	Mec	Thr	Ala	Val	Gly 125	His	Leu	Pro			
5	Pro	Pro 130	C∧≅	Val	Cys	Ala	Cys 135	Val	Glu 	,Asn	Leu	Glu 140	Thr	Asp	Cys	Cys			:
	Pro 145	Leu	Phe	Mec	Gln	Asn 150	His	Leu	Arg	Ile	Gln 155	Phe	Thr	Leu	Cys	Cys 160			
10	PTO	Ala	Ser	Pro	Leu 165	Gly	Lys	Ser	Leu	Ser 170		Phe	Ser	Leu	Leu 175	Leu			
15	Pro	Pro	Pro	Leu 130	Pro	Pro	Ser	Pro	His 185	Ala	Phe	Leu	Phe	Leu 190	Val	Leu		•	
	Thr	Leu	Leu 195	Pro	Ser	Gly	Pro	Tyr 200	Pro	Thr	Leu	Phe	Glu 205	Lys	Thr	Lys			
20		Cys 210	Leu	His	Arg	Arg	Leu 215	Phe	Leu	Phe	Xaa								
	(2)	INF	, DRMA!	rion	FOR	SEO	ID N	JO: 4	115:									•	
25		-		SEQU	ENCE	CHAI		eris:	rics		, 5								
30		•	(xi)	(: (:	B) T D) T	YPE: OPOL	ami: OGY:	no a	cid ear			: 415	5 :						
	Met 1	Leu	Pro	Asp	Glu 5	Ser	Phe	Gly		Leu 10	Leu	Ser	Ile	Pro	Ser 15	Leu	-		
35	Thr	Pro-	Ser	Ala 20	Ala	Ala	Pro	Ser	Phe 25	Cys	Val	His	Leu	Met 30	Gln	Ala			
1 0	Ser	Arg	Ser 35	Ser	Lys	Arg	Ala	Ser 40	His	Vaļ	Pro	Val	His 45	Leu	Leu	Trp			
+0	Gly	qzA 07	Xaa	•	•									•				•	
1 5	. (2)	INFO	OPMAT	יו ריד	FOR	SEO	מ תז	in - 4	16.		,								
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50			(xi)	() ()	B) T D) T	YPE: OPOL	H: 50 amir XGY: SCRIF	no ac line	id ar			416	5 :						
55	Mec 1	Arg	Pro	Gly	Ser 5	Phe	Ser	Phe	Ile	Ala 10	Phe	Leu	Ala	Thr	Glu 15	Val			
	Ser	Ser	Cys	Phe 20	Pro	Gly	Arg	Pro	Asp 25	Cys	Xaa	Thr	Gly	Met 30	Trp	Leu			
60	Leu	Gln	Leu	Gln	Lys	Lys	Gln	Arg	Thr	Leu	Leu	Ala	Mec	Ala	Pro	Arg			

35 40 45 Arg Xaa 50 5 (2) INFORMATION FOR SEQ ID NO: 417: 10 (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 70 amino acids (B) TYPE: amino acid (D) TOPOLOGY: linear (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 417: 15 Asp Arg Pro Cys Pro Ser Ser Leu Trp Lys Val Phe Pro Leu Leu Leu 5 10 Leu Leu Met Arg Leu Phe Pro Leu Pro Val Pro Gly Asn Gln Arg Ala 20 25 20 Xaa Leu Pro His Pro Phe Xaa Ala Pro Arg Leu Pro Cys Leu Leu Cys 35 40 45 25 Leu Cys Thr Gln Gln Phe Xaa Val Cys Ser His Tyr Leu Pro Ala Gly 55 Tyr Arg Val Asn Ser Xaa 70 30 (2) INFORMATION FOR SEO ID NO: 418: 35 (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 40 amino acids (B) TYPE: amino acid (D) TOPOLOGY: linear (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 418: 40 Met His Glu Lys Ala Trp Asn Leu Ile Leu Leu Trp Trp Leu Ser Leu 5 10 Asp Leu Leu Gly Val Ala Lys Thr Ala Met Trp Ala Gln Trp Cys Gly 45 Leu Asn Asp His Lys Gly Lys Xaa 35 50 (2) INFORMATION FOR SEQ ID NO: 419: (i) SEQUENCE CHARACTERISTICS: 55 (A) LENGTH: 22 amino acids (B) TYPE: amino acid (D) TOPOLOGY: linear (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 419: 60

Met Ala Phe Val Leu Leu Xaa Cys Phe Val Xaa Leu Gln Ser Ser Xaa

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Gly Arg Ala Val Gln Kaa
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5
    (2) INFORMATION FOR SEQ ID NO: 420:
          (i) SEQUENCE CHARACTERISTICS:
10
               (A) LENGTH: 33 amino acids
                (B) TYPE: amino acid
                (D) TOPOLOGY: linear
           (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 420:
     Met Phe Ser Leu Leu Trp Leu Val Cys Val Pro Ser Asn Ser Ser Val
                                    20
     1. 5
     Ala Asn Val Thr Ala Ser Arg Gly Gly Val Phe Lys Arg Ser Leu Gly
      20 23
20
     His Glu Gly Phe Ser Xaa
        . 35
25
     (2) INFORMATION FOR SEQ ID NO: 421:
           (i) SEQUENCE CHAPACTERISTICS:
                 (A) LENGTH: 35 amino acids
30
                  (B) TYPE: amino acid
                 (D) TOPOLOGY: linear
            (mi) SEQUENCE DESCRIPTION: 5EQ ID NO: 421:
     Lys Trp Leu Leu Phe Ile Phe Leu Leu Cys Leu Glm Leu Val Asn Ala
 35
      1 5
                                     10
      Leu Leu Ser Leu Phe Gln Glu Arg Phe Val Mis Cys Pro Ala Arg Phe
      20 23
 40
      Val Ser Xaa
             35
 45
      (2) INFORMATION FOR SEQ ID NO: 422:
            (i) SEQUENCE CHARACTERISTICS:
                  (A) LENGTH: 32 amino acids
                   (B) TYPE: amino acii
 50
                  (D) TOPOLOGY: linear
             (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 422:
      Met Leu Leu Phe Leu Ser Ila Thr Am Ser Leu Ser Phe Ile Ser Val
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       Asp Lys Pro Phe Gly Gln Ser Glu Amp Wal Tys Pro Wal Ile Ser Kaa
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5	(2)	INF	ORMA	LION	FOR	SEQ	ID I	NO: 4	123 :					_		
10		•			A) L B) T D) T	ENGT YPE : OPOL	H: l ami OGY:	27 a no a lin	mino cid ear	aci		: 42	3:			-
15	Met 1	Glu	Phe	Leu	Phe 5	Asn	Lys	Thr	Gly	Trp 10	Ala	Phe	Ala	Ala	Leu 15	Cys
	Phe	Val	Leu	Ala 20	Met	Thr	Ser	Gly	Gln 25	Met	Trp	Asn	His	Ile 30	Arg	Gly
20	Pro	Pro	Ty:: 35	Ala	His	Lys	Asn	Pro 40	His	Thr	Gly	His	Val 45	Asn	Tyr	Ile
	· His	Gly 50		Ser	Gln	Ala	Gln 55	Phe	Val	Ala	Glu	Thr 60	His	Ile	Val	Leu -
25	Leu 65	Phe	Asn	Gly	Gly	Val 70	Thir	Leu	Gly ∴	Met	Val 75	Leu	Leu	Cys	Glu	Ala 80
30	.Ala	Thr	Ser	Asp	Met 85	Asp	Ile	Gly	Lys	Arg 90	Lys	Ile	Met	Cys	Val 95	Ala
	Gly	Ile	Gly	Leu 100	Val	Val	Leu	Phe	Phe 105	Ser	dıl	Met	Leu	'Ser 110	Ile	Phe
35	yrg	Ser	Lys 115	Tyr	His	Gly	Tyr	Pro 120	Tyr	Ser	Phe	Leu	Met 125	Ser	Xaa	
40	(2)	INF		rion SEQU											-	
45			1	(B) T D) T	YPE: OPOL	ami : OGY	9 am no a lin	cid ear						٠	
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	Met 1	Thr	dīī	His	Ser 5	Arg	Glu	Ser	Phe	Хаа 10	Leu	Leu	Arg	Val	Val 15	Ala
50	Pro	Ser	Gln	<u>Ala</u> 20	Pro	Gly	Met	Gln	Val 25	Ser	Pro	Ser	Gln	Arg 30	Ala	Trp
55	Arg	Arg	Pro 35	Leu	His	Arg	Cys	His 40	Val	Ala	Ala	Pro	Arg 45	Pro	His	His
	Phe	Ala 50		Phe	Arg	Asn	Pro 55	Phe	Ser	đxĐ	Ser	Phe 60	Ile	Lys	Leu	Leu
60	Tyr 65	Arg	Tyr	Leu	Xaa											

5	(2)	IN	FORM	ATION	I FOF	R SEC	Q ID	NO:	425	:						>
			(i)		(A) : (B) '	LENG Type	TH: : am	92.ai ino a	mino acid		ds ,					
10			(xi) SE(LOGY ESCRI			SEQ :	ID NO	D: 43	25:			
	Met 1		/ Leu	ı Lys	Leu S		Gly	/ Arg	TYI	: Il=		Leu	ı Ile	: Leu	ı Ala	a Val
15	Gln	Ile	Ala	Tyr 20		Val	. Gln	. Ala	Val 25		, Ala	Ala	Gly	JO Lys		Asp
20	Ala.	Val	Ph∈ 35		Gly	Phe	: Ser	Asp 40		Leu	Leu	Lys	Leu 45		· Asp	Thr
	Trp	Pro 50	Thr	Thr	Arg	Ser	Leu 55		Arg	Gln	. Asp	Glu 60		Gln	. Asp	Arg
25	Val 65	His	Ile	Leu	Gly	Gly 70		Pro	Gln	. Leu	His 75	Gly	His	Ser	Pro	T <u>yr</u> 80
	Gly	Ļeu	Pro	Gly	Arg 85	Gly	Glu	Arg	Tyr	Val 90		Хаа				
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	(2)	INF		MOIT												
35			(i)	(A) .L B) T	ENGT YPE :	RACT H: 3 ami .CGY:	80 a	minc cid		.ds					
			(xi)	SEQ			_			EQ I	D NO	: 42	6 :			
40	Met 1	Ala	Arg	Arg	Ser S	Ala	Phe	Pro	Ala	Ala 10	Ala	Leu	Trp	Leu	Trp 15	Ser
45	Ile	Leu	Leu	Cys 20	Leu	Leu	Ala	Leu	Arg . 25	Ala	Glu	Ala	Gly	Pro 30		Gln
-	Glu	Glu	Ser 35	Leu	Tyr	Leu	Trp	Ile 40	Asp	Ala	His	Gln	Ala 45	Arg	Val	Leu
50	Ile	Gly 50	Phe	Glu	Glu	Asp	Ile 55	Leu	Ile	Val	Ser	Glu 60	Gly	Lys	Met	Ala
	910 65	Phe	Thr	His	Asp	Phe 70	Arg	Lys	Ala	Gln	Gln 75	Arg	Met	Pro	Ala	Ile 80
55	PTO	Val	Asn	Ile	His 85	Ser	Met	Asn	Phe	Thr 90	ŢŢ₽	Gln	Ala	Ala	Gly 95	Gln
	Ala	Glu	Tyr	Phe 100	Tyr	Glu	Phe	Leu	Ser 105	Leu	Arg	Ser	Leu	Asp 110	Lys	Gly.

	Ile	Met	Ala 115	Asp	Pro	Thr	Val	Asn 120	Val	Pro	Leu	Leu	Gly 125	Thr	Val	Pro
5	His	Lys 130	Ala	Ser	Val	Val	Gln 135	Val	Gly	Phe	Pro	Cys 140	Leu	Gly	Lys	Gln
	Asp 145		Val	Ala	Ala	Phe 150	Glu	Val	Asp	Val	Ile 155	Val	Met	Asn	Ser	Glu 160
10	Gly	Asn	Thr	Ile	Leu 165	Gln	Thr	Pro	Gln	Asn 170	Ala	Ile	Phe	Phe	Lys 175	Thr
15	Cys	Gln	Gln	Ala 180	Glu	Cys	Pro	Gly	Gly 185	Сñå	Arg	Asn	Gly	Gly 190	Phe	Cys
	Asn	Glu	Arg 195	Arg	Ile	Cys	Glu	Cys 200	Pro	Asp	Gly	Phe	His 205	Gly	Pro	His
20	CĀS	Glu 210	rys,	Ala	Leu	Cys	Thr 215	Pro.	Arg	Cys	Met	Asn 220	Gly	Gly	Leu	Cys
	Val 225	Thr	Pro	Gly	Phe	Cys 230	Ile	Cys	Pro	Pro	Gly 235	Phe	Tyr	Gly	Val	Asn 240
25	Cys	Asp	Lys	Ala	Asn 245	Cys	Ser	Thr	Thr	Cys 250	Phe	Asn	Gly	Gly	Thr 255	Cys
30	Phe	Tyr	Pro	Gly 260	Lys	Cys	Ile	Xaa	Pro 265	Pro	Gly	Leu	Glú	Gly 270	Glu	Gln
	Cys	Glu	Ile 275	Ser	Lys	Cys	Pro	Gln 280	Pro	Cys	Arg	Asn	Gly, 285	Gly	Lys	Cva
35	Ile	Gly 290	Lys	Ser	Lys	Cys	Lys 295	Xaa	Ser	Lys	Gly	300 Tyr	Gln	Gly	Asp	Leu
•.	Cys 305	Ser	Lys	Pro	Val	Cys 310	Glu	Pro	Gly	Cys	Gly 315	Ala	His	Gly	Thr	Cys 320
40	His	Glu	Pro	Asn.	Lys 325	Cys	Gln	Cys	Gln	Glu 330	Gly	Trp	His	Gly	Arg 335	His
45	Cys	Asn	Lys	Arg 340	Tyr	Glu	Ala		Leu 345	Ile		Ala	Leu	Arg 350	Pro	Ala
	Gly	Ala	Gln 355	Leu	Arg	Gln	His	Thr 360	Pro	Ser	Leu	Lys	Lys 365	Ala	Glu	Glu
50	Arg	Arg 370	Asp	Pro	Pro	Glu	Ser 375	Asn	Tyr	Ile	đĩ	Хаа 380				
55	(2)	INFO)PMAT	'ION	FOR	SEQ	ID N	10: 4	27:		9		•			

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 24 amino acids
- (B) TYPE: amino acid
- (D) TOPOLOGY: linear
- 60 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 427:

Met Thr Ser Ash Leu Leu Leu Leu Thr Leu Leu Leu Lys Asp Thr Leu 10 . 5 Maa Leu Ala Lys Maa Asn Maa Maa 20 10 (2) INFORMATION FOR SEQ ID NO: 423: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 47 amino acids (B) TYPE: amino acid 15 (D) TOPOLOGY: linear (xi) SEQUENCE DESCRIPTION: SEQ D NO: 423: Met Arg His His Thr Gln Leu Asn Phe Ile Phe Leu Val Glu Met Val 10 20 Phe Leu His Val Gly Gln Ala Gly Leu Lys Leu Pro Thr Ser Gly Asp -. 25 Xaa Ala Cys Phe Gly Leu Pro Lys Val Leu Gly Leu Gln Ala Kaa 25 40 35 (2) INFORMATION FOR SEQ ID NO: 429: 30 (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 5 amino acids (B) TYPE: amino acid (D) TOPOLOGY: linear 35 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 429: Met Cys Ser Asp Kaa 40 (2) INFORMATION FOR SEQ ID NO: 430: (i) SEQUENCE CHARACTERISTICS: 45 (A) LENGTH: 144 amino acids (B) TYPE: amino acid (D) TOPOLOGY: linear (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 430: 50 Leu Leu Ser Ile Leu Leu Cys Leu Leu Ala Ser Gly Leu Val Val Phe 5 7.0 Phe Leu Phe Pro His Ser Val Leu Val Asp Asp Gly Ile Lys Val 25 55 Val Lys Val Thr Phe Asn Lys Gln Asp Ser Leu Val Ile Leu Thr Ile Met Ala Thr Leu Lys Ile Arg Asn Ser Asn Phe Tyr Thr Val Ala Val 60

(2) INFORMATION FOR SEQ ID NO: 433:

	Thr -65	Ser	Leu	Ser	Ser	Gln 70	Ile	Gln	Tyr	Meţ	Asn 75	Thr	Val	Val	Asn	Phe 30
5	Thr	Gly	rys	Ala	Glu 85	Met	Gly	Gly	Pro	Phe 90	Ser	Tyr	Val	Tyr	Phe 95	Phe
0	Cys	Thr	Val	Pro 100	Glu	Ile	Leu	Val	His 105	Asn	Ile	Val	Ile	Phe 110	Met	Arg
	Thr	Ser	Val 115	Lys	Ile	Ser	Tyr	Ile 120	Gly	Leu	Mec	Thr	Gln 125	Ser	Ser	Leu
5	Glu	Thr 130	His	His · .	Tyr	Val	Asp 135		Gly	Gly	Asn	Ser 140	Thr	Ala	Ile	Xaa
10				-												
.0																
	(2)	INF		SEQU	, ENCE	CHA	RACT	NO: Eris	TICS	:	•					
25			(*ci)	(B) 1	TYPE :	ami LOGY :	37 am ino a : lir :PTIC	near near			. 43	1 -			
30														T and	7 011	
	1				. 5					10				,	15	
35	Tyr	Pro	Ser	Leu 20		Ser	His	Ser	Val 25		Leu :	Val	Thr	Ser 30		Val
	Ala	Ser	Ala 35	Leu	Хаа											-
40	(2)	INE	ORMA	MOIT	FOF	R SEÇ] ID	NO:	. 432:							
45					(A) (B) (D)	LENG TYPE TOPO:	TH: : am LOGY	reris 37 au ino s : li	mino acid near	acio			•			
	Mai	- 71-						IPTI						. 63.	, 3/a l	l Cys
50	ne.		י ספי	. 116		5	ı ve.	y.		10					13	
	Val	l Gla	n Ala	a Thi		a Ala	a Cys	s Pro	7 Tr; 25		Sez	Gl:	n Cys	s Arg		a Gly
55	Se:	r Vai	1 Pro	Se:	Xaa	3										
-																

5				() ()	A) L: B) T D) T	CHAF ENGTI YPE : OPOLO	H: 1: ami: OGY:	92 ar no ad line	mino cid ear	aci						
			(xi)	SEQ0	JENC:	E DES	SCRI!	10ITS	4: SE	EQ II	ON C	: 431	3 :			
10	Met 1	Met	Ala	Ala	Met [*] 5	Val	Leu	Thr	Ser	Leu 10	Ser	Cys	Ser	Pro	Val 15	Val
	Gln	Ser	bio	Pro 20	Gly	Thr	Glu	Ala	Asn 25	Phe	Ser	Ala	Ser	Arg 30	Ala	Ala
15	Cys.	qzA	Pro 35	Trp	Lys	Glu	Ser	Gly 40	Asp	Ile	Ser	Asp	Ser 45	Gly	Xaa	Ser
	Thr	Thr 50	Ser	Gly	His	Trp	Ser 55	Gly	Ser	Ser	Gly	Val 60	Ser	.Thr	Pro	Sèr
20	`Pro 65	Pro	His	Pro	Gln	Ala 70		Pro	Lys	Tyr	Leu 75	ĠĵĀ	Asp	Ala	Phe	Gly 80
25	Ser	Pro	Gln		Asp . 85	His	Gly	Phe	Glu	Thr 90	Asp	Pro	Asp	Pro	Phe 95	Leu
- 3	Leu	Asp	Glu	Pro 100	Ala	Pro	Arg	Lys	Arg 105	Lys	Asn	Seŗ	Val	Lys 110	Val	Met
30	Tyr	Lys	Cys 115	Leu	Trp	Pro	Asn	Cys 120	Gly	Lys	Val	Leu	Arg 125	Ser	Ile	Val
	Gly	Ile 130		Arg	His	Val	Lys 135	Ala	Leu	His	Leu	Gly 140	Asp	Thr ,	Val	Asp
35	Ser 145		Gln	Phe	Lys	Arg 150	Glu	Glu	qzA	Phe	Tyr 155	Tyr	Thr	Glu	.Val	Gln 160
40	Leu	Lys	Glu	Glu	Ser 165	Ala	Ala	Ala	Ala	Ala 170	Ala	Ala	Ala	Ala	Asp 175	Pro
70	Gln	Ser	Leú	Gly 180		Pro	Pro	Pro	Ser 185	Gln	Leu	Pro	Pro	PT0	Ala	Xaa
45				-					-						•	
50	(2)	INF	ORMA	TION	FOR	. SEQ	ID	NO :	434:							
			(i)		(A) I	CHA LENGI CYPE:	TH: :	31 an	nino		is					
55			(xi)			ropoi E de				EQ I	D NC): 4 3	34:			
	Met 1		Thr	Asn	Ту <u>т</u> 5		Thr	: Asp	Val	Cys 10		· Leu	Phe	e Ser	Tyr 15	Leu
60	Asn	Tyr	Leu	Tyr	Phe	His	His	His	Leu	Pro	Val	Pro	Asn	Thr	. Xaa	L

20 25 30

	5	(2)	INF	ORMAI	MOI	FOR	SEQ	ID !	1 0 : 4	135:							
1	0				(; (;	A) Li E) T D) T	ENGT: YPE : OPOL	H: 1 emi OGY:	ERIS 01 au no a lin PTIO	mino cid ear	aci		: 43	ā:			
1	=	Met 1	Gly	Phe	Phe	Phe 5	Val	Leu	Phe	Phe	Leu 10	Tyr	Leu	Ala	Leu	Ser 15	Arg
1	J	Asp	Trp	Ser	Ile 20	Asn	Phe	Leu	Lys	Asp 25	His	Arg	Ile	Asn	Phe 30	Phe	Val
, 2'	0	Ala	Thr	Ser 35	Tyr	Phe	Ser	Val	Tyr 40	Val	Arg	Gly	Xaa	Pro 45	Xaa	Val	Pro
		Ala	Asp 50	Thr	Pro	ŗe'n	Gly	Pro 55	Leu	Leu	Ser	Leu	Trp 60	Leu	His	His	Asn
2	5.	Ala 65	Phe	Phe	Ser	Ile	Leu 70		Lys		Pro	Glu 75	Asn	Xaa	Xaa	Phe	Leu 80
, 3	0	Ile	Leu	Lys	Lys	Leu 85	Val	Val	Glu	Mec	Gly 90		Asp	Leu	Phe	Ile 95	Ser
	U	Pro	Glu	Asn	Lys 100	Xaa								,			
3	5	(2)	TNE	OPMA	r T. AN	EOR	SEA.	ו חד	NO:	436.							
			1141		SEQU	ENCE	CHA	RACT	ERIS	TICS		•_					
4	-0		٠	(xi)	(B) T	YPE:	ami OGY :	7 am no a lin PTIO	cid ear		•	·: 43	6:			
4	15	Mec 1		Arg	Tyr	Phe 5		Phe	Phe	Ile	Leu 10		Phe	Met	Lys	Val 15	
		Leu	Asn	The	Thr 20	_	Pro	Ala	Pro	Arg 25		Ala	Thr	Leu	Arg 30		Ala
. 5	50	Asn	Lys	Ser 35	-	Xaa						٠					
										•							

55 (2) Information for SEQ ID NO: 437:

60

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 42 amino acids(B) TYPE: amino acid

(D) TOPOLOGY: linear

Tyr Ser Lys Glu Pro Cys

```
(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 437:
      Phe Ser Thr Ile Arg Ser Gly Leu Thr Asp Arg Ser Val Asn Phe Leu
 5
     Phe Leu Phe Leu Asp Val Pro Asp Cys Arg Leu Val Asn Ile Glu Leu
                20
     Met Ala Asn Ser Thr Val Thr His Ala Xaa
10
          35
    - (2) INFORMATION FOR SEQ ID NO: 438:
            (i) SEQUENCE CHARACTERISTICS:
               (A) LENGTH: 1 amino acids
                  (B) TYPE: amino acid
                  (D) TOPOLOGY: linear
20
           (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 438:
     Leu
25
  (2) INFORMATION FOR SEQ ID NO: 439:
            (i) SEQUENCE CHARACTERISTICS:
30
                 (A) LENGTH: 25 amino acids
                   (B) TYPE: amino acid
                   (D) TOPOLOGY: linear
            (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 439:
35
     Met Pro Trp Arg Arg Ala Gly Leu Met Met Leu Pro Ile Ile Thr Gly
                                                            15
     Cys Cys Pro Cys Ser Ala Ser Ile Xaa
             20
40
      (2) INFORMATION FOR SEQ ID NO: 440:
45
            (i) SEQUENCE CHARACTERISTICS:
                   (A) LENGTH: 54 amino acids
                   (B) TYPE: amino acid
                   (D) TOPOLOGY: linear
            (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 440:
50
     Met Tyr Leu Cys Lys Thr Val Lys Val Leu Ile Cys Tyr Asp Trp Ile
     Leu Gly Leu Val Ser Ser Gly Gln His Trp Val Val Ser Leu Ser Tyr
5.5
                 20
                                     25
     Ser Ile Arg Val Tyr Pro Ala Met His Phe Thr Leu Cys Val His Ile
              35
                                40
                                                   45
```

```
(2) INFORMATION FOR SEQ ID NO: 441:
            (i) SEQUENCE CHARACTERISTICS:
                  (A) LENGTH: 42 amino acids
                   (B) TYPE: amino acid
10
                  (D) TOPOLOGY: linear
            (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 441:
     Met Thr Ala Leu Val Trp Arg Lys Gly Pro Asp Gly Gly Ser Arg Lys
                                  10
15
     Pro Ile Leu Leu Phe Phe Phe Leu Pro Leu Ile Leu Cys Phe His
                                    25
     Ser Phe Ile His Ser Ser Asn Ile Cys Xaa
20
              35
                                40
                      · .. . . .
     (2) INFORMATION FOR SEQ ID NO: 442:
25
            (i) SEQUENCE CHARACTERISTICS:
                   (A) LENGTH: 66 amino acids
                   (B) TYPE: amino acid
                   (D) TOPOLOGY: linear
30
            (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 442:
     Met Phe Leu Thr Trp Phe Leu Leu Ser Val Ala Trp Xaa Ala
                     5
                                        10 .
     Leu Thr Arg Ser Gly Arg Ser Cys Leu Pro Leù Val Gly Arg Pro Arg
                  20 25
     Glu Gln Ser Pro Arg Thr His Cys Ala Ala Ser Ser Thr Lys Glu Arg
40
     Asn Ser Asp Pro Gln Pro Ser Pro Pro Glu Val Val Gly Pro Leu Trp
                     55 ·
      Ser Xaa
45
      65
      (2) INFORMATION FOR SEQ ID NO: 443:
50
             (i) SEQUENCE CHARACTERISTICS:
                   (A) LENGTH: 156 amino acids
                   (B) TYPE: amino acid
                   (D) TOPOLOGY: linear
55
             (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 443:
      Met Lys Ala Ile Gly Ile Glu Pro Ser Leu Ala Thr Tyr His His Ile.
       1
                      5
60
      Ile Arg Leu Phe Asp Gln Pro Gly Asp Pro Leu Lys Arg Ser Ser Phe
```

				20					25					30					
<u> </u>	Ile	Ile	Tyr 35	Asp	Ile	Met	Asn	Glu 40	Leu	Met	Gly	Lys	Arg 45	Phe	Ser	Pro			
5	Lys	Asp 50	Pro	Asp	Asp	Asp	Lys 55	Phe	Phe	Gln	Ser	Ala 60	Met	Ser	Ile	Cys			
10	Ser 65	Ser	Leu	Arg	Asp	Leu 70	Glu	Leu	Ala	Tyr	Gln 75	Val	His	Gly	Leu	Lèu 80			
	Lys	Thr	Gly	Asp	Asn 85	Trp	Lys	Phe	Ile	Gly 90	Pro	qzA	Gln	His	Arg 95	Asn			
15	Phe	Tyr	Tyr	Ser 100	Lys	Phe	Phe	Asp	Leu 105		Cys	Leu	, Met	Glu 110	Gln	Ile			
20	Asp	Val	Thr 115	Leu	Lys	Trp	Tyr	Glu 120	Asp	Leu	Ile	Pro	Ser 125	Ala	Tyr,	Phe		•	
	Pro	His 130		Gln	Thr	Met	Ile 135	His	Leu	Leu	Gln	Ala 140	Leu	Asp	Val	Ala			
25	Asn 145		Leu	Ģlu	Val	Ile 150	Pro	Lys	Ile	Trp	Glu 155								
30	- (2)	INF		UÇEZ)	ENCE	CHA LENGI	ID RACT TH: 5	ERIS	TICS nino	5:	is								
35			(xi)	٠ ((D) 7	ropoi	LOGY:	lir	near	SEQ I	D NC): 44	4:						
	Met 1		Phe	Leu	Phe 5		Phe	Ile	· Val	. Ph∈		Tyr	Leu	Trp	Gly 15	Leu			
40	Phe	Thr	Ala	Gln 20		Gln	Lys	Lys	Glu 25		Ser	Thr	Glu	30		. Lys			
45	Ile	Glu	Val		His	: Arg	, Pro	Glu 40		ı Cys	: Ser	. Lys	Thr 45		. Lys	. Lys	,		
	Gly	Asp 50		. Leu	r Tās	Cys	Pro 55		ı Xaa										
50	(2)	INE	ORM	TION	ı FOF	R SEC	Q ID	NO:	445								•		
·55				:	(A) (B) (D)	LENG TYPE TOPO	ARACT TH: : am LOGY ESCR	416 ino : li	amin acid near	o ac		O: 4	45 :						
60	Me	arq	Thu	Let		e Asi	n Lei	ı Le	ı Tr	o Le		a Le	ı Ala	a Cy:	s Se	r Pro	>		

-					_	_	_	_		- •		_	- •			
	Val	His	Thr	Thr 20	Leu	Ser	Lys	Ser	Asp 25	Ala	Lys	ГĀЗ	Ala	Ala 30	Ser	Γλε
.5	Thr	Leu	Leu 35	Glu	Lys	Ser	Gln	Phe 40	Ser	Asp	Lys	Pro	Val 45	Gln	qzA	Arg
10	Gly	Leu 50	Val	Val	Thr	Asp	Leu 55	Lys	Ala	Glu	Ser	Val 60	Val	Leu	Glu	His
- 0	Arg 65	Ser	Tyr	.Cys	Ser	Ala 70	īys	Ala	Arg	Asp	Arg 75	His	Phe	Ala	Gly	Asp 80
15	Val	Leu	Gly	Tyr	Val 85	Thr	Pro	Trp	Asn	Ser 90	His	Gly	Tyr	Asp	Val 05	Thr
	Lys	Val		Gly .100	Ser	Lys	Phe	Thr	Gln 105	Ile	Ser	Pro	Val	Trp 110	Leu	Gln
20 .	Leu	Lys	Arg 115	Arg	Gly	Arg	Glū	Mec 120	Phe	Glu	Val	Thr	Gly 125	Leu	His	ązĄ
25	Val	Asp 130	Gln	Gly	Trp	Met	Arg 135	Ala	Val	Arg	Lys	His 140	Ala	Lys	Gly	Leu
دع _.	His 145	Ile	Val	Pro	Arg	Leu 150	Leu	Phe	Ģlu	Ąsp	Trp 155	Thr	Tyr	Asp	Asp	Phe 160
30	Arg	Asn	Val	Leu	Asp 165		Glu	Asp	Glu	Ile 170	Glu	Glu	Leu	Ser	Lys 175	Thr
	Val	Val	Gln	Val 180	Alā	Lys	Asn	Gln	His 185	Phe	Asp	Gly	Phe	Val 190	Val	Glu
35	Val	Trp	Asn 195	Gln	Leu	Leu	Ser	Gln 200	Lys	Arg	Val	Gly	Leu 205	Ile	His	Met
40	Leu	Thr 210	His	Leu	Ala	Glu	Ala 215	Leu	His	Gln	Ala	Arg 220	Leu	Leu	Ala	Leu
-	Leu 225	Val	Ile	Pro	Pro	Ala 230	Ile	Thr	Pro	Gly	Thr 235	Asp	Gln	Leu	Gly	Met 240
45	Phe	Thr	His	-	Glu 245		Glu	Gln	Leu	Ala 250		Val	Leu	Asp	Gly 255	
	Ser	Leu	Met	Thr 260	Tyr	qzA	Tyr	Ser	Th= 265	Ala	His	Gln	Pro	Gly 270	Pro	Asn
50	Ala	Pro	Leu 275	Ser	Trp	Val	Arg	Ala 280	Cys	Val	Gln	Val	Leu 285	Asp	Pro	Lys
55	Ser	Lys 290	Trp	Arg	Ser	Ļys	Ile 295	Leu	Leu	Gly	Leu	Asn 300	Phe	Tyr	Gly	Met
ر ر	305	Tyr	Ala	Thr	Ser	.Lys 310	qzA	Ala	Arg	Glu	Pro 315	Val	Val	Gly	Ala	Arg 320
60	īĀI ,	Ile	Gln	Thr	Leu 325	Lys	Asp	His	Arg	Pro 330	Arg	Mec	Val	Trp	Asp 335	Ser

	Gln	Xaa	Ser	Glu 340	His	Phe	Phe	Glu	Tyr 345	Lys	ŗås	Ser	Arg	Ser 350	Gly	Arg	
3	His	Val	Val 355	Phe	Tyr	Pro	Thr	<i>Leu</i> 360	Lys	Ser	Leu	Gln	Val 365	Arg	Leu	Glu	
10	Leu	Ala 370	Arg	Glu	Leu	Gly	Val 375	Gly	Val	Ser	Ile	TIP 380	Glu	Leu	Ala	Arg	
	Ala 385	Trp	Thr	Thr	Ser	Thr 390	Thr	Cys	Ser	Arg	Trp 395	Ala	Leu	Arg	Pro	Pro 400	
15	Arg	Trp	Thr	Cys	Ser 405	Phe	Leu	Ser :	His	Gly 410	Val	Ser	Glu	`Gln	Val 415	Xaa	
					•			٠									
20	(2)	INF(ORMA:	TION	FOR	SEO	ID 1	NO: 4	- 446:								
25	,		(i)	SEQU)))	ENCE A) L B) T D) T	CHA ENGT YPE:	RACT H: 6 ami CGY:	ERIS 4 am no a lin PTIO	TICS ino cid eár	acid		: 44	6 :	٠			
30	Met 1		Pro	Gly	Pro 5	'Leu	Ser	Ala	Thr	Gln 10	Ala	Val	Val	Ile	His 15	Thr	
35	Thr	His	CÀ2	Leu 20	Gln	Leu	Pro	Val	Trp 25		Leu	Ser	Leu	Val 30	Ser	Glu	
	Leu	Leu	Gly 35	_	Ala	Pro	Pro	His 40	Asn	Lys	qzA	Ala	Leu 45	Arg	Pro	Ser	
40	Lys	Lys 50		Lys	Lys	Lys	Leu 55	. Xaa	Gly	Gly	Pro	Val 60	.Pro	Ile	Pro	Pro	-
o_										-							
45	(2)	INF	orma	TION	FOR	SEQ	ID	NO:	447:							-	
50			(i)	SEQU ((ENCE (A) I (B) T	CHA LENGI TYPE:	RACT H: 2 ami OGY:	ERIS 206 a ino a : lir :PTIC	TICS mino cid mear	aci		: 44	7:				
55	Met 1		Gly	Ala	Lys 5	Pro	His	ŢŢ	Leu	Pro 10	Gly	Pro	Leu	His	Ser 15	Pro	
60	Gly	Ten	Pro	Leu 20		Leu	Val	Leu	Leu 25	Ala	Leu	Gly	Ala	Gly 30	Trp	Ala [,]	

	Gln	Glu	Gly 35	Ser	Glu	Pro	Val	Leu 40	Leu	Glu	Gly	Glu	Cys. 45	Leu	Val	Val	
5	Cys	Glu 50	Pro	Gly	Arg	Ala	Ala 55	Ala	Gly	Gly	Pro	-60	Gly	Ala	Ala	Leu	
-	Gly 65	Glu	Ala	Pro.	Pro	Gly 70	Arg	Val	Ala	Phe	Ala 75	Ala	Val	Arg	Ser	Хаа 80	
10	His	His	Glu	Pro	Ala 85	Gly	Glu	Thr	Gly	Asn 90	Gly	Thr	Xaa	Gly	Ala 95	Ile	
. 15	Tyr	Phe	Asp	Gln 100	Val	Leu	Val	Asn :	Glu 105	Gly	Gly	Gly	Phe	Asp 110	Arg	Ala	
	Ser	Gly	Ser 115	Phe	Val	Ala	Pro	Val 120	Arg	·Gly	Val	Tyr	Ser 125	Phe	Arg	Phe	
20		130				٠	Asn 135					1.40					
	145					150	Ile				155					160	
25				٠	165		Ser	•	;	170					175		
30				180			Leu		185					190	Gly	Lib	
	Lys	Ţyr	Ser 195		Phe	Ser	Gly	200	Leu	Ile	Phe	Pro	Leu 205	Xaa			
35	(2)	INF	OPMA	TION	FOR	SEQ	ID	NO:	448:						•		
40					(A) I (B) 1 (D) 1	LENG TYPE TOPOI	RACT TH: 6 : ami LOGY:	2 an .no a : lir	mino acid near	ació): 4 4	:8:				
45	Met 1		: Ser	Leu	Leu S		Ala	. Gly	Leu	Gln 10		Ser	· Leu	Cys	Gly 15	Lys	
	Xaa	a Leu	Tr	Ala 20		Thi	T <u>r</u> p	Tyr	Leu 25		Cys	Cys	. Leu	Leu 30		Phe	
50	Phe	e His	Glr 33		/ Cys	Cys	: Asp	His 40		s Ser	. TÀs	Glr	Gln 45		: Ile	Pro	
55	Ası	1 Leu 50		s Sei	TYI	Cys	s Gly 55		se:	Thr	: Ile	e Glu 60		. Kaa	• ·		
	(2)) IN	FORM	TION	1 FOE	R SE(Q ID	NO:	449	=							

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 316 amino acids
- (B) TYPE: amino acid
- (D) TOPOLOGY: linear

								lin									
5 ·			(xi)	SEQ	JENC:	E DE:	SCF.I.	PTIO	N: 51	EQ II	ON C	: 44	⇒ :				
J	Mec 1	Ser	Thr	Lys	Lys 5	Leu	Cys	Ile	Val	Gly 10	Gly	Ile	Leu	Leu	Val 15	Phe	
10	Gln	Ile	Ile	Ala 20	Phe	Leu	Val	Gly	Gly 25	Leu	Ile	Ala	Pro	Gly Gly	Pro	Thr	
	Thr	Ala	Val 35	Ser	Tyr	Mec	Ser	Val 40	Lys	Cys	Val	Asp	Ala 45	Arg	Lys	Asn	
15	His	His 50	Lys	Thr	Lys	Trp.	Phe 55	Val	Pro	đưT.	Gly	PT0	Asn	His	Cys	Asp	
20	Lys 55	Ile	Arg	Asp	Ile	Glu 70	Glu	Ala	Ile	Pro	Arg 75	Glu	Ile	Glu	Ala	Asn 80	
	Asp	Ile	Val	Phe	Ser 85	Val	His	Ile	Pro	Lau 90	Pro	His	Mec	Glu	Met 95	Ser	
25	·Pro	Trp	Phe	Gln 100	Phe	Met	Xaa	Phe	Ile 105	Leu	Gln	Leu	Asp	Ile 110	Ala	Phe	
	Lys	Leu	Asn 115	Asn	Gln	Ile	Arg	Glu `120	Aśn	Ala	Glu	Val	Ser 125	Met	Asp	Val	
30	Ser	Leu 130	Ala	Tyr	Arg	Asp	Asp 135	Ala	Phe	Ala	Glu	Trp 140	Thr	Glu	Mes	Ala	
35	His 145	Glu	Arg	Val	Pro	Arg 150	Lys	Leu	Lys	Cys	Thr 155	Phe	Thr	, Ser	Pro	Lys 150	
	Thr	Pro	Glu	His	Gly 165	Gly	Pro	Val	Thr	Met 170	Asn	Val	Met	Ser	Phe 175	Leu	
40	Ser	Trp	Lys	Leu 180	Gly	Leu	Trp	Pro	Met 185	.FÅ2	Phe	Tyr	Leu	Leu 190	Asn	Ile	
	Arg	Leu	Pro 195	Val	Asn	Glu	Lys	Lys 200	Lys	Ile	Asn	Val	Gly 205	Ile	Gly	Glu	
45	·Ile	Lys 210	qzA	Ile	Arg	Leu	Val 215	Gly	Ile	His	Gln	Asn 220	Gly	Gly	Phe	Thr	
50	Lys 225	Val	Trp	Phe	Ala	Met 230	ŗňz	Thr	Phe	Leu	Thr 235	Pro	Ser	Ile	Phe	Ile 240	
	Ile	Met	Val	Trp	Ty:: 245	Trp	,Arg	Arg	Ile	Thr 250	Mec	Mec	Ser	Arg	Pro 255	Pro	
55	Val	Leu	Leu	Glu 250	Lys	Val	Ile	Phe	Ala 265	Leu	Gly	Ile	Ser	Мес 270	Thr	Phe	
	Ile	Asn	Ile 275	Pro	Val	Glu	Trp	Phe 280	Ser	Ile	Gly	Phe	Asp 285	dzt,	Thr	Trp	
60	Met	Leu	Leu	Phe	Gly	qzA	Ile	Arg	Gln	Ala	Ser	Ser	Met	Xaa	Càa	Phe	

290 295 Xaa Pro Ser Gly Ser Ser Ser Val Ala Ser Thr Xaa 305 310 315 5 (2) INFORMATION FOR SEQ ID NO: 450: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 24 amino acids (B) TYPE: amino acid (D) TOPOLOGY: linear . (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 450: 15 Met Leu Ala Leu Leu Gly Leu Leu Ala Gly Thr Glu His Pro Pro Gly 5 10 Pro Gln Gly Pro Gly Pro Ser Xaa 20 (2) INFORMATION FOR SEQ ID NO: 451: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 10 amino acids (B)-TYPE: amino acid (D) TOPOLOGY: linear (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 451: Met Pro Ser Gly Ala Cys Cys Ser Pro Xaa 5 35 (2) INFORMATION FOR SEQ ID NO: 452: (i) SEQUENCE CHARACTERISTICS: 40 (A) LENGTH: 26 amino acids (B) TYPE: amino acid (D) TOPOLOGY: linear (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 452: 45 Met Leu Pro Ala Leu Ser Thr Val Leu Leu Pro Thr Pro Ser Leu Cys 1 5 Ser Gly Asn Pro Arg Glu Gly Trp Ala Xaa 50 (2) INFORMATION FOR SEQ ID NO: 453: 55 (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 172 amino acids (B) TYPE: amino acid (D) TOPOLOGY: linear (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 453: 60

	Mec 1	Tyr	Ser	Leu	His 5	Ser	Trp	Val	Gly	Leu 10	Ile	Ala	Val	Ile	Cys 15	Tyr			
5	Leu	Leu	Gln	Leu 20	Leu	Ser	Gly	Phe	Ser 25	Val	Phe	Leu	Leu	Pro 30	Tzp	Ala			
	Pro		Ser . 35	Leu	Arg	Ala	Phe	Leu 40	Mec	Pro	Ile	His	Val 45	Tyr	Ser	Gly			
10	Ile	Val 50	Ile	Phe	СĵА	Thr	Val 55	Ile	Ala	Thr	Ala	Leu 60	Mec	Gly	Leu	Thr			•
15	Glu 65	Lys	Leu	Ile	Phe	Ser 70	Leu	Arg	Asp	Pro	Ala 75	Tyr	Ser	Thr	Phe	Pro 80			
	Pro	Glu	Gly	Val	Phe 85	Val	Asn	Thr	Leu	Gly 90	Leu	Leu	Ile	Leu	Val 95	Phe			
20	Gly	Ala	Leu	Ile 100	Phe	Trp	Ile	Val	Thr 105	Yid	Pro	Gln	Trp	Lys 1:10	Arg	Pro			
	Lys	Glu	Pro 115	Asn	Ser	Thặ	Ile	Leu 120	His	Pro	Asn	Gly	Gly 125	Thr	Glu	Gln			
25.	Gly	Ala 130	Arg	Gly	Ser	Met	Pro 135	Ala	Tyr ;	Ser	Gly	Asn 140	Asn	Met	Asp	Lys			
30	Ser 145	qzA	Ser	Glu	Leu	Asn 150	Xaa	Glu	Val	Ala	Ala 155	Arg	Lys	Arg	Asn	Leu 160			
	Ala	Leu	Asp	Glu	Ala 165	Gly	Gln	Arg	Ser	Thr 170	Met	Xaa					•		
35	(2)	INFO	ORMAC	noi	FOR	SEQ	ID N	NO: 4	154:			٠							
			(i)	_				ERIS										•	
40			(xi)	(3) T D) T	YPE: OPOL	ami: OGY:	6 am no a lin PTIO	cid ear			: 454	4:			-			
45	Met 1							Gln						Ile	Thr 15	Thr			
	Val	Ser	Val	Leu 20	Val	Phe	QzA	Phe	Arg 25	Pro	Ser	Leu	Glu	Phe 30	Phe	Leu			
50	Glu	Ala	Хаа 35	Ser	Val	Xaa	Leu	Ser 40	Ile	Phe	Ile	Tyr	Asn .45	Ala	Ser	Lys			
55	Pro	Gln 50	Val	Pro	Glu	Tyr	Ala 55	Pro	Arg	Gln	Glu	Arg 60	Ile	Arg	ğzA	Leu			
	Ser 65	Gly	Asn	Leu	Trp	Glu 70	Arg	Ser	Ser	Gly	Asp 75	Gļy	Glu	Glu	Leu	Glu 80	•	•	
60	Arg	Leu	Íhr	Lys	Pro 85	Lys	Ser	Asp	Glu	Ser 90	Asp	Glu	Asp	The	Phe 95	Xaa			·

5	
	(2) INFORMATION FOR SEQ ID NO: 455:
. 10	(i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 171 amino acids (B) TYPE: amino acid (D) TOPOLOGY: linear (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 455:
15	Met Arg Gly Pro Ala Glm Ala Lys Leu Leu Pro Gly Ser Ala Ile Glm 1 5 10 . 15
20	Ala Leu Val Gly Leu Ala Arg Pro Leu Val Leu Ala Leu Leu Leu Val 20 25 30
	Ser Ala Ala Leu Ser Ser Val Val Ser Arg Thr Asp Ser Pro Ser Pro 35 40 45
25	Thr Val Leu Asn Ser His Ile Ser Thr Pro Asn Val Asn Ala Leu Thr 50 55 60
٠.	His Glu Asn Gln Thr Lys Pro Ser Île Ser Gln Ile Ser Thr Thr Leu 55 70 75 80
30	Pro Pro Thr Thr Ser Thr Lys Lys Ser Gly Gly Ala Ser Val Val Pro 8S 90 95
35	His Pro Ser Pro Thr Pro Leu Ser Gln Glu Glu Ala Asp Asn Asn Glu 100 105 110
	Asp Pro Ser Ile Glu Glu Glu Asp Leu Leu Met Leu Asn Ser Ser Pro 115 120
40	Ser Thr Ala Lys Asp Thr Leu Asp Asn Gly Asp Tyr Gly Glu Pro Asp 130 135 140
	Tyr Asp Trp Thr Thr Gly Pro Arg Asp Asp Asp Glu Ser Asp Xaa His 145 150 155 160
45	Leu Gly Arg Lys Gln Gly Leu His Gly Asn Xaa 165 170
50	(2) INFORMATION FOR SEQ ID NO: 456:
55	(i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 92 amino acids (2) TYPE: amino acid (D) TOPOLOGY: linear (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 456:
	Met Lys Ala Ser Gln Cys Cys Cys Cys Leu Ser His Leu Leu Ala Ser. 1 5 10 15

	Val	Leu	Leu	Leu 20	Leu	Leu	Leu	Pro	Glu 25	Leu	Ser	Gly	Xaa	Leu 30	Xaa	Val
5	Leu	Leu	Gln 35	Ala	Ala	Glu	Ala	Ala 40	Pro	Gly	Xaa	Gly	Pro 45	Pro	Asp	Pro
	Arg	Pro 50	Gly	His	Tyr	Arg	Arg 55	Cys	His	yrg	Ala	Leu , 60	Thr	Pro	Ala	Gln
10	Gln 65	510	Gly	Arg	СĴЪ	Leu 70	Ala	Glu	Ala	Ala	Gly .75	Ala	Ala	Gly	Leu	Arg 80
15	Gly	Arg	Gln	Trp	Gln 85	Gln	Pro	Cys	Gly	90	Ala	Xaa				
	(2)	INF(ORMA!	NOIT	FOR	SEQ	ID P	۱O: ٔ 4	157:					-	•	
20		-	(i) .	{	A) L B) T	ENGT YPE:	H: 2 ami	ERIS 06 a no a lin	mino cid		ds	٠				
25	Ile			_				PTIO His		Val				Leu		Glu
30	1 Leu	Thr	Ala	Glu 20	5 Ser	Leu	Glu	Ala	Gly 25	10 Asp	Ser	Asn	Gln	Phe 30	15 Cys	Trp
	Arg	Asn	Leu 35	Phe	Ser	Cys	Ile	Asn 40	Leu	Leu	Arg	Ile	Leu 45	Asn	Lys	Leu
35	Thr	Lys 50	Trp	Lys	His	Ser	Arg 55	Thr	Met	Met	Leu	Val 60	Val	Phe	Lys	Ser
40	Ala 65	PTO	Ile	Leu	Lys	Arg 70		Leu	Lys	Val	Lys 75	Gln	Ala	Met	Met	Gln 80
					85		•			90					95	Arg
45 .	Gln	Trp	Arg	Lys 100	Ser	Asn	Met	Lys	Thr 105	Met	Ser	Ala	Ile	Tyr 110	.Gln	Lys _.
	Val	Arg	His 115	Arg	Leu	Asn	Asp	Asp 120	Trp	Ala	Ty :	Gly	Asn 125	Asp	Leu	Asp
50	Ala	Arg 130	Pro	Trp	Asp	Phe	Gln 135	Ala	Glu	Glu	Cys	Ala 140	Leu	Arg	Ala	Asn
55	Ile 145	Glu	Arg	Phe	Asn	Ala 150	Arg	Arg	Tyr	Asp	Arg 155	Ala	His	Ser	Asn	Pro 160
	Asp	Phe	Leu	Pro	Val 165	Asp	Asn	Cys	Leu	Gln 170	Ser	Val	Leu	Gly	Gln 175	Arg
60	Val	qzA	Leu	Pro 180	Glu	Asp	Phe	Gln	Met 135	Asn	Ty≃	Asp	Leu	Trp 190	Leu	Glu

	•	
	Arg Glu Val Phe Ser Lys Pro Ile Ser Trp Glu Glu Leu Leu 195 200 205	
5		
	(2) INFORMATION FOR SEQ ID NO: 458:	
10	 (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 317 amino acids (B) TYPE: amino acid (D) TOPOLOGY: linear (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 458: 	
15	Met Ala Pro Pro Ala Pro Gly &ro Ala Ser Gly Gly Ser Gly Glu V 1 5 10 15	al ·
20	Asp Glu Leu Phe Asp Val Lys Asn Ala Phe Tym Ile Gly Ser Tym G 20 25 30	ln
20	Gln Cys Ile Asn Glu Ala Xaa Xaa Val Lys Leu Ser Ser Pro Glu A 35 40 45	æg
25	Asp Val Glu Arg Asp Val Phe Leu Tyr Arg Ala Tyr Leu Ala Gln A 50 55 60	æg
	Lys Phe Gly Val Val Leu Asp Glu Ile Lys Pro Ser Ser Ala Pro G 65 70 75	80 80
30	Leu Gln Ala Val Arg Met Phe Ala Asp Tyr Leu Ala His Glu Ser A 85 90 95	
35	Arg Asp Ser Ile Val Ala Glu Leu Asp Arg Glu Met Ser Arg Ser X	(aa
33	Asp Val Thr Asn Thr Thr Phe Leu Leu Met Ala Ala Ser Ile Tyr I 115 120 125	.eu
40	His Asp Gln Asn Pro Asp Ala Ala Leu Arg Ala Leu His Gln Gly A	ds.
	Ser Leu Glu Cys Thr Ala Met Thr Val Gln Ile Leu Leu Lys Leu F 145 150 155 1	Asp 160
45	Arg Leu Asp Leu Ala Arg Lys Glu Leu Lys Arg Met Gln Asp Leu 3 165 170, 175	4sp
50	Glu Asp Ala Thr Leu Thr Gln Leu Ala Thr Ala Trp Val Ser Leu Ala 185 190	Ala
. 30	Thr Gly Gly Glu Lys Leu Gln Asp Ala Tyr Tyr Ile Phe Gln Glu 195 200 205	Met
55	Ala Asp Lys Cys Ser Pro Thr Leu Leu Leu Leu Asn Gly Gln Ala 220	Ala
	Cys His Met Ala Gln Gly Arg Trp Glu Ala Ala Glu Gly Leu Leu (225 230 235	Gln 240.
60	Glu Ala Leu Asp Lys Asp Ser Gly Tyr Pro Glu Thr Leu Val Asn	Leu

•					245					250					255	
5	īle	Val	Leu	Ser 260	Gln	His	Leu	Gly	Lys 265	Pro	Pro	Glu	Val	Thr 270	Asn	Arg
-	Tyr	Leu	Ser 275	Gln	Leu	Lys	ASP	Ala 230	His	- Vlå	Ser	His	Pro 285	Phe	Ile	Lys
10	Glu	Тут 290		Ala	Lys	Glu	Asn 295	qzA	Phe	Asp	Arg	Leu 300	Val	Leu	Gln	Tyr
	Ala 305	Pro	Ser	Ala	Glu	Ala 310	GļĀ	Pro	Glu	Leu	Ser 315	Gly	Pro			•
15								:			•					
	(2)	INF				_	ID 1									
20				(A) L B) T D) T	ENGT YPE: OPOL	RACT H: 2 ami OGY: SCRI	61 a no a lin	mino cid ear	aci		: 45	, 9 :			
25	\	2	**= 3	G1			-7-1	Dh	*		.	21-		*	. 1 -	~ .
23	Arg 1	ASD	var	•	Arg 5	ASD	Val	rne	;	10	Arg	Ala	īĀĒ	rea	15	Gln
30	Arg	Lys	Phe	Gly 20		Val	Leu	Asp	Glu 25	Ile	ŗàs	Pro	Ser	Ser 30	Ala	Pro
	Glu	Leu	Gln 35	Ala	Val	Arg	Met	Phe 40	Ala	qzA	Tyr	Leu	Ala 45	His	Glu	Ser
35	Arg	Arg 50	Asp	Ser	Ile	Val	Ala 55	Glu	Leu	Asp	Arg	Glu 60	Met	Ser	Arg	Ser
	Хаа 65	Asp	Val	Thr	Asn	Thr 70	Thir	Phe	Leu	Leu	Мес 75	Ala	Ala	Ser	Ile	Tyr 80
40	Leu	His	Asp	Gln	Asn 85	Pro	Asp	Ala	Ala	Leu 90	Arg	Ala	Leu	His	Gln 95	Gly
45	Asp	Ser	Leu	Glu 100	Cys	Thr	Ala	Mec	Thr 105	Val	Gln	Ile	Leu	Leu 110	_	Leu
	Asp	Arg	Leu 115	qzA	Leu	Ala	Arg	Lys 120	Glu	Leu	Lys	Arg	Мес 125	Gln	qaA	Leu
50	Asp	Glu 130	Asp	Ala	Thr	Leu	Thr 135	Gln	Leu	Ala	Thr	Ala 140	Trp	Val	Ser	Leu
	Ala 145	Thr	GļĀ	Gly	Glu	Lys 150	Leu.	Gln	qzA	Ala	Tyr 155	Tyr	Ile	Phe	Gln	Glu 160
55	Met	Ala	Asp	Lys	Cys 165	Ser	Pro	Thr	Leu	Leu 170	Leu	Leu	Asn	Gly	Gln 175	Ala
60	Ala	Cys	His	Мес 180	Ala	Gln	Gly	Arg	Trp 185	Glu	Ala	Ala	Glu	Gly 190	Leu	Leu.

	Gln	Glu	Ala 195	Leu	qzA	Lys	ÇzA	Ser 200	Gly	Tyr	Pro	Glu	Thr 205	Leu	Val	Asn
5	Leu	Ile 210	Val	Leu	Ser	Gln	His 215	Leu	Gly	Lys		Pro 220	Glu	Val	Thr	Asn
	Arg 225	Tyt	Leu 	Ser	Gln	Leu 230	Lys	Asp	Ala	His	Arg 235	Ser	His	Pro	Phe	Ile 240
10	Lys	Glu	Tyr	Gln	Ala 245		Glu	Asn	Asp	Phe 250	qzA	Arg	Leu	Val	Leu 255	Gln
15	Tyr	Ala	Pro	Ser 260	Ala	-		ż	•							
	(2)	INF(ORMAC	TION	FOR	SEQ	ID I	.: OV.	460:							
20		ı)))	A) L B) T D) T	engt YPE: OPOL	H: 1 ami OGY:	.56 a no a lin	ear	aci		. 46	,			
25	Met	Lvs							N: S Ser					His	His	Ile
	1			•	5	-				10					15	
30	Ile	Arg	Leu	Phe 20	Asp	Gln	Pro	Gly	Asp 25.	Pro	Leu	Lys	Arg	Ser 30	Ser	Phe
	Ile	Ile	Tyr 35		Ile	Met	Asn	Glu 40		Met	Gly	Lys	Arg 45	Phe	Ser	Pro
35	Lys	Asp 50		Asp	Asp	Asp	Lys 55		Phe	Gln	Ser	Ala 60		Ser	Ile	Cys
40	Ser 65		· Leu	Arg	Asp	Leu 70	Glu	. Leu	Ala	Tyr	Gln 75	Val	His	Gly	Leu	Leu 80
	Lys	Thr	Gly	. Asb	Asn 85		Lys	Phe	: Ile	Gly 90		Asp	Gln	His	Arg 95	Asn
45	Ph∈	YY	Tyr	Ser 100		Phe	Phe	e Asp	Leu 105		Cys	Leu	Met	Glu 110		Ile
	Asş	val	Thr 115		Lys	Trp	TAI	Glu 120		Leu	Ile	Pro	Ser 125		. Tyr	Phe
50	Pro	130		Glr	Thr	Met	135		: Lev	. Leu	Glr	140		Asp	Val	. Ala
55	As:		Leu		ı Val	150		o Lys	s Ile	e Trp	155		ī			
	(2)) IŅ	FORM	ATION	1 FOR	R SEÇ] ID	NO:	461:	:						

(i) SEQUENCE CHARACTERISTICS:



				()	B) T	YPE : OPOL(ami : YGC	no a	cid ear	acio						
5	Lys		(xi) Ser				-					•		Leu	Arg	Glu
	1				5					10					15	
10	Glu	Ile	Leu	Met 20	Leu	Met	Ala	Arg	Asp 25	ŗĀŽ	His	Pro	Pro	30 30	Lau	Gin
	Val	Ala	Phe 35	Ala	Asp	Cys	Ala	Ala 40	qzA	Ile	ŗàs	Ser	Ala 45	TYI	Glu	Ser
15	Gln	Pro 50	Ile	Arg	Gln	Thr	Ala. 55		Asp	Trp	Pro	Alà 60		Ser	Leu	Asn
20	Cys 65	Ile	Ala	Ile	Leu	Phe 70	Leu	Arg	Ala	Gly	Arg 75	Thr	Gln	Glu	Ala	80 CI T
<u>.</u>	Lys	Met	Leu	Gly	Leu 85	Phe	Arg	Lys	His	Asn 90	Lys	ĭle	Pro	Arg	Ser 95	Glu
25	Leu	Leu	Asn	Glu 100	Leu	Met	Asp	Ser	Ala 105	Lýs	Val	Ser	Asn	Ser 110	Pro	Ser
	Gln	Ala	Ile 115	Glu	Val	Val	Glu	Leu 120	Ala	Ser	Ala	Phe	5er 125	Leu	Pro	<u>i</u> le
30		Glu 130	-	Leu	Thr	Gln	Arg 135	Val	Met	Ser	Asp	Phe 140	Ala_	Ile	Asn	Gln
35	Glu 145		Lys	Glu	Ala	Leu 150		Asn	Leu	Thr	Ala 155	Leu	Thr	Ser	Asp	Ser 160
55	Asp	Thr	Asp	Ser	Ser 165		Asp	Ser	Asp	Ser 170		Thr	Ser	Glu	Gly 175	Lys
40.		•														
	. (2)	· TATE	ORMA	アナヘト	FOR	SEO	O TO	NO:	462:							
45	(=)			SEQU	ENCE	E CHA	\PACT	ERIS	TICS		ids			•		
					(B) ?	TYPE	: am:	ino a	acid							
50			(xi)				LOGY ESCRI			SEQ I	ID NO	: 46	2.:			
	Met 1		: Ser	Asp	Asr S		ı Ser	. Asp	Ile	Glu 10		Glu	. Asp	Leu	Lys 15	Leu ·
55	Glu	ı Lev	ı Arg	7 Arg 20		ı Arg	J AST	Lys -	His 25		ı Lys	Glu	Ile	Gln 30		Leu
60	Glr	n Ser	r' Arg 35		ı Lys	s His	s Glu	1 Ile 40		ı Ser	: Leu	тут	Thr 45		Leu	Gly.

	Lys	Val 50	Pro	Pro	Ala	Val	Ile 55	Ile	Pro	Pro	Ala -	Ala 60	Pro	Leu	Ser	Gly
5	Arg 65	Arg	Arg	Arg.	Pro	Thr 70	Lys	Se≝	Lys	Gļv	Ser 75	Lys	Ser	Ser	yrg	Ser 80
	Ser	Ser	Leu	Gly	Asn 85	Lys	Ser	Pro	Gln	90	Ser	Gly	Asn	Leu	Ser 95	Gly
10	Gln	Ser	Ala	Ala 100	Ser	Val	Leu	His	Pro 105	Gln	Gln	Thr	Leu	His 110	Pro	Pro
15	Gly	Asn	Ile 115	Pro	Glu _.	Ser	Gly	Gln 120 :	Asn	Gln	Leu	Leu	Gln 125	Pro	Leu	Lys
	Pro	Ser 130	Pro	Ser	Ser	Asp	Asn 135	Leu	Tyr	Ser	Ala	Phe 140	Thr	Ser	Asp	Gly
20	Ala 145	Ile	Ser	Val	Pro	Ser 150	Leu	Ser	Alá	Pro	Gly 155	Gln	Gly	Thr	Ser	Ser 160
	Thr	Asn	Thr	Val	Gly 165	Ala	Thr	Val	Asn	Ser 170	Gln	Ala	Ala	Gln	Ala 175	Gln
25·	Pro	Pro	Ala	Met 180	Thr	Ser	Ser	Arg	Lys 185	Gly	Thr	Phe	Thr	Asp 190	Asp	Leu
30	His	Lys	Leu 195	Val	Asp	Asn	Trp	Ala 200	Arg	qzA	Ala	Met	Asn 205	Leu	Ser	Gly
		210					215					220		Gly		
35	225					230				,	235			Thr		240
			•		245					250				Ser	255	
40		,		260					265					Phe 270		,
45			275					280		•	•		285			
	Pro	L e u 290		· Gln	Phe	Gln	295		. Gly	Thr	Ala	Ser 300		Gln ,	. Asn	. Phe
50	Asn 305		e Ser	Asn	. Leu	Gln 310		: Ser	: Ile	: Sez	315		Pro	Gly	Ser	Asn 320
	Leu	Arg	Thr	Thr												
55																

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(2) INFORMATION FOR SEQ ID NO: 463:

(i) SEQUENCE CHARACTERISTICS:

60

(A) LENGTH: 133 amino acids

(E)	TYPE:	amino	acid

(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 463:

5 Ile Gln Asp Leu Gln Ser Arg Gln Lys His Glu Ile Glu Ser Leu Tyr 1 5 10 15

Thr Lys Leu Gly Lys Val Pro Pro Ala Val Ile Ile Pro Pro Ala Ala 20 25 30

Pro Leu Ser Gly Arg Arg Arg Pro Thr Lys Ser Lys Gly Ser Lys
35 40 45

Ser Ser Arg Ser Ser Ser Leu Gly Asn Lys Ser Pro Gln Leu Ser Gly 15 50 55 60

Asn Leu Ser Gly Gln Ser Ala Ala Ser Val Leu His Pro Gln Gln Thr
65 70 75 80

20 Leu His Pro Pro Gly Asn Ile Pro Glu Ser Gly Gln Asn Gln Leu Leu 85 90 95

Gln Pro Leu Lys Pro Ser Pro Ser Ser Asp Asn Leu Tyr Ser Ala Phe 100 105 110

Thr Ser Asp Gly Ala Ile Ser Val Pro Ser Leu Ser Ala Pro Gly Gln
115 120 125

Gly Thr Ser Ser Thr 30 130

. (2) INFORMATION FOR SEQ ID NO: 464:

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- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 53 amino acids
 - (B) TYPE: amino acid
 - (D) TOPOLOGY: linear.
- 40 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 464:

Thr Ser Asp Gly Ala Ile Ser Val Pro Ser Leu Ser Ala Pro Gly Gln
1 5 10 15

45 Gly Thr Ser Ser Thr Asn Thr Val Gly Ala Thr Val Asn Ser Gln Ala

Ala Gln Ala Gln Pro Pro Ala Met Thr Ser Ser Arg Lys Gly Thr Phe 35 40 45

Thr Asp Asp Leu His

55

- (2) INFORMATION FOR SEQ ID NO: 465:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 48 amino acids
- 60 (B) TYPE: amino acid

	(D) TOPOLOGY: linear (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 465:	
5	Lys Gly His Met Asn Tyr Glu Gly Pro Gly Met Ala Arg Lys Phe Se 1 5 10 15	r
	Ala Pro Gly Gln Leu Cys Ile Ser Met Thr Ser Asn Leu Gly Gly Se	r
10	Ala Pro Ile Ser Ala Ala Ser Ala Thr Ser Leu Gly His Phe Thr Ly 35 40 45	·s
15 -		
•	(2) INFORMATION FOR SEQ ID NO: 466:	
20	(i) SEQUENCE CHARACTERISTICS:(A) LENGTH: 31 amino acids(B) TYPE: amino acid(D) TOPOLOGY: linear	
25	(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 466:	
	Gln Pro Leu Lys Pro Ser Pro Ser Ser Asp Asn Leu Tyr Ser Ala Ph 1 5 10 15	ıe
30	Thr Ser Asp Gly Ala Ile Ser Val Pro Ser Leu Ser Ala Pro Gly 20 25 30	
35	(2) INFORMATION FOR SEQ ID NO: 467: (i) SEQUENCE CHARACTERISTICS:	
40	(A) LENGTH: 57 amino acids (E) TYPE: amino acid (D) TOPOLOGY: linear (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 467:	
	Val Arg Val Ala Ala Ala Glu Ser Met Xaa Leu Leu Leu Glu Cys A 1 5 10 15	la
45	Xaa Val Arg Gly Pro Glu Tyr Leu Thr Gln Met Trp His Phe Met C 20 25 30	ys
50	Asp Ala Leu Ile Lys Ala Ile Gly Thr Glu Pro Asp Ser Asp Val L 35 40 45	
50	Ser Glu Ile Met His Ser Phe Ala Lys 50 55	
55	(2) INFORMATION FOR SEQ ID NO: 458:	

(i) SEQUENCE CHARACTERISTICS:

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(A) LENGTH: 85 amino acids

(B) TYPE: amino acid

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	,															
5	Met 1	Glu	Ile	Asn	Asn S	Gln	Asn	Cys.	Phe	Ile 10	Val	Ile	qzA	Leu	Val 15	Arg
	Thr	Val	Mec	Glu, 20	Asn	Gly	Val	Glu	Gly 25	Leu	Leu	Ile	Phe	Gly 30	Ala	Phe
10	Leu	Pro	Glu 35	Ser	Trp	Leu	Ile	Gly 40	Val	Arg	Cys	Ser	Ser 45	Glu	Pro	Pro
	Lys	Ala 50	Leu	Leu	Leu	Ile	Leu 55	Ala	His	Ser	Gln	Lys 60	Arg	Arg	Leu	Asp
15	Gly 65	Trp	Ser	.Phe	Ile	Arg 70	His	Leu	Arg	Val	His 75	Tyr	Cvs	Val	Ser	Leu 80
20	Thr	Ile	His	Phe	Ser 85											-
					•										•	
25	(2)	INF	ORMA	rion	FOR	SEQ	ID 1	NO: 4	469 _:						•	
			(i)	- (A) L	ENGT	H: 2	ERIS O am no a	ino		s					
30			(xi)	(D) I	OPOL	.OGY :	lin PTIO	ear	EQ I	D NO	: 46	9 :			
,	Gln 1	Asp	Lys	His	Ala 5		Glu	Val	Arg	Lys 10	Asn	Lys	Glu	Leu ,	Lys 15	Glu
35	Glu	Ala	Ser	Arg 20			÷						· <u>·</u>			
40	(2)	TNE	4MPO	TION	FOR	SEO	מז	NO:	470 :							
10	(2)	-				_										
45				((A) I (B) I (D) I	ENGI YPE : YPOL	TH: 9 ami LOGY:	ERIS 2 am no a lin PTIC	ino cid ear	ació		: 47	0 :		•	
	Gln 1					Pro			٠		Val			Pro	Leu 15	Xaa
50 ·			Ser	Хаа 20	Thr		His	Xaa	Leu , 25	Pro		Ser	Gly	Cys 30	Leu	Arg
55	Arg	Glm	Ser 35	. Xaa		Leu	Pro	Val	Val		Xaa	Leu	. Cys 45		Trp	Phe
	Ser	Cys 50) Leu	Ala	Ser	· Leu 55		Val	. Pro	Gly	Gln 60		Cys	Val	Thr

Cys Pro Phe Pro Ser Leu Pro Phe Gln Asp Lys His Ala Glu Glu Val

	65				•	70					75		•			80	
	æş	Lys	Ast.	Lys	35 35	Leu	Lys	Glu	Glu	Ala 90	Ser	Arg					
5																	
	27	DF;	RA:	:::::	FCR	SEQ	ID N	JO: 4	71:								
. 0	٠.			(2	R) L1 B) T C) T	ENGTI 172: 1701/	H: 3 ami: CGY:	ERIST 7 am no ac line	ino a cid sar	acid							
5			%1. <i>i</i>	SEÇ	.e.ic	E DES	ECRI:	PTIC	V: 51	EQ II	ONO	: 47	<u>.</u> :				
	P#0 1	The	Arg	CÀE	Cys 5	Thr	Thr	Gln	Pro	Cys 10	Arg	Ser	Ser	Ala	Arg 15	Arg	
20.	? το	೦/3	T::p	721° 20	770	Met	Val	Pro	Ser 25	Pro	Glu	Gly	Arg	Glu 30	Kaa	Gln	
	320	T:==	Cys , 35	PTO	Ser												
25									•								
	(2)	2 7:	:FIG.	:::::	FCR	SEQ	ID N	NO: 4	72 :								-
30	•			() ()	A) L B) T D) T	ENGT YPE : CPOLA	H: 3 ami CGY:	ERIST 63 au no a lin PTIO	mino cid ear	aci		: 47:	, 2 :				
35	Met 1	Lyş	٣ţ	Ser	Leu 5	Asn	Glu	Asn	Ser	Ala 10	Arg	Ser	Thr	Ala	Gly 15	Cys	,
40	Leu	? : :	7al	?⊤o 20	Leu	Phe	Asn	Gln	Lys 25	Lys	Arg	Asn	Arg	Gln 30	Pro	Leu	
	Tier	Ser	Asn 33	?≈0	Leu	Lys	وعد	Asp 40	Ser	Gly	Ile	Ser	Thr 45	Pro	Ser	Asp	
45	Asn	∓∵∓ 50	ಸಿಕ್	Phe	220	220	Leu 55	Pro	Thr	Asp ,	Trp	Ala 60	Trp	Glu	Ala	Val	
	Asn. 65	Pro	31 <u>:</u>	%aa	Ala	2 7 0 70	Val	Met	Lys	Thr	Val 75	Asp	Thr	Gly	Gln	Ile 80	
50	720	His	Ser	Val	Ser 85	λīg	Pro	Leu	Arg	Ser 90	Gln	qzA	Ser	Val	Phe 95	Asn	
55	Ser	lle	Gla	Ser 100	Asn	Thr	Gly	Arg	Ser 105	Gln	Gly	Gly	Trp	Ser 110	Tyr	Arg	
- -	qεK	βlγ	Asm 115	Lys	Asn	Thr	Ser	Leu 120	Lys	Thr	Trp	Xaa	Lys 125	Asn	Asp	Phe	
60	Lyš	Pro	Gla	C/s	Lys	Arg	Th::	Asn	Leu	Val	Ala	Asn 140	Asp	Gly	Lys	Asn	

	Ser 145	Cys	Pro	Mec	Ser	Ser 150	Gly	Ala	Gln	Gln	Gln 155	.Lys	Gln	ren	Arg	Thr 160
5	Pro	Glu	Pro	Pro	Asn 165	Leu	Ser	Arg	Asn	Lys 170	Glu	Thr	Glu	Leu	Leu 175	Arg
10	Gln	Thr	His	Ser 180	Ser	Lys	Ile	Ser	Gly 185	Cys	Thr	Met	Arg	Gly 190	Leu	Asp
	ŗàz	Asn	Ser 195	Ala	Leu	Gln	Thr	Leu 200	Lys	Pro	Asn	Phe	Gln 205	Gln	Asn	Gln
15	Tyr	Lys 210	-Xaa	Gln	Met	Leu	Asp 215	Asp :	Ile	Pro	Glu	Asp 220	Asn	Thr	Leu	Lys
	Glu 225	Thr	Ser	Leu	Tyr	Gln 230	Leu	Gln	Phe	Ľys	Glu 235	Lys	Ala	Ser	Ser	Leu 240
.20	Arg	Ile	Ile	Ser	Ala 245	Val	Ile	Glu	Sèr	Met 250	Lys	Tyr	Trp	Arg	Glu 255	His
25	Ala	Ģln	Lys	TH: 260		Leu	Leu	Phe	Glu 265	Val	Leu	Ala	Val	Leu 270	Asp	Ser
	Ala	Val	Thr 275	Pro	Gly	Pro	Tyr	Tyr 280	Ser	Lys	Thr	Phe	Leu 285	Met	AIG	Asp
30	Gly	Lys 290	Asn	Thr	Leu	Pro	Cys 295	Val	Phe	Tyr	Glu	Ile 300		Arg	Glu	Leu
	Pro 305		Leu	Ile	Arg	Gly 310		Val	His	Arg	Cys 315		Gly	Asn	īài	Asp 320
35	Gln	Lys	Lys	Asn	Ile 325		Gln	Суз	Val	Ser 330		yżd	Pro	Ala	Ser 335	Val
40	Ser	Glu	Gln	Lys 340		Phe	Gln	Ala	Phe 345		Lys	Ile	Ala	Asp 350		Glu
.0	Met	Gln	Tyr 355		Ile	Asn	.Val	Mec 360		. Glu	Thr			ē		
45	(2)	INF	OFMA	ACIT.	FOR	SEÇ) ID	NO:	4 73 :							
50	(2) INFORMATION FOR SEQ ID NO: 473: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 45 amino acids (B) TYPE: amino acid (D) TOPOLOGY: linear (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 473:															
55	Ser 1		Asp	Ser	Val		e . Asr	. Ser	: Ile	Glr 10		Asr	ית ד	: Gly	Arg	Ser
	Glr	Gly	/ Gly	7 TI		Ty:	: Arg	j Asp	Gly 25		ı Lys	AST	ı Thi	5e: 30		Lys
60	Thr	TIT) Xaa	ı Lv	s Asr	n Ast) Phe	Lys	: Pro	Glr	ı Çys	: Lys	. Arg	j		

606

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(2) INFORMATION FOR SEQ ID NO: 474: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 36 amino acids (B). TYPE: amino acid 10 (D) TOPOLOGY: linear. (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 474: Asn Lys Glu Thr Glu Leu Leu Arg Gln Thr His Ser Ser Lys Ile Ser 5 15 Gly Cys Thr Met Arg Gly Leu Asp Lys Asn Ser Ala Leu Gln Thr Leu Lys Pro Asn Phe 20 35 (2) INFORMATION FOR SEQ ID NO: 475: 25 (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 49 amino acids (B) TYPE: amino acid (D) TOPOLOGY: linear 30 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 475: Ser Ser Leu Arg Ile Ile Ser Ala Val Ile Glu Ser Met Lys Tyr Trp 35 Arg Glu His Ala Gln Lys Thr Val Leu Leu Phe Glu Val Leu Ala Val 25 20 Leu Asp Ser Ala Val Thr Pro Gly Pro Tyr Tyr Ser Lys Thr Phe Leu 40 40 Mer 45 (2) INFORMATION FOR SEQ ID NO: 476: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 42 amino acids 50 (B) TYPE: amino acid (D) TOPOLOGY: linear (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 476: Pro Arg Leu Ile Arg Gly Arg Val His Arg Cys Val Gly Asn Tyr Asp 55 10 Gln Lys Lys Asn Ile Phe Gln Cys Val Ser Val Arg Pro Ala Ser Val . 20 25 30

60 Ser Glu Gln Lys Thr Phe Gln Ala Phe Val

5	(2)	INF	ORMAT	rion	FOR	SEQ	ID I	NO: 4	<u>1</u> 77 :							
10			(i) : (xi)	() ()	A) L 2) T D) T	ENCT YPE : OPOL	H: 3 ami CGY:	70 a no a lin	mino cid ear	aci		; 47	7 :	-		
15	Gly 1	Val	Phe	Arg	Pro 5	CĀŻ	Val	Cys	Gly	Arg 10	Pro	Ala	Ser	Leu	Thr 15	Cys
1.5	Ser	510	Leu	Asp 20	Pro	Glu	Vaľ	Gly	Pro 25	Tyr	Cys	qzA	Thir	Pro 30	Thr	Met
20	Arg	Thr	Leu 135	Phe	Asn	Leu	Leu	Trp 40	Leu	Ala	Leu	Ala	Cys 45	Ser	Pro	Val
	His	Thr 50	Thr	Leu	Ser	Lys	Ser 55	qeA	Ala	Lys	Lys	Ala 60	Ala	Ser	Lys	Thr
25	Leu 65	Leu	Glu	Lys	Ser	Gln 70	Phe	Ser	Asp ;	Lys	Pro 75	Val	Gln	Asp	Arg	Gly 80
30	Leu	Val	Val	Thr	Asp 85	Leu	Lys	Ala	Glu	Ser 90	Val	Val	Leu	Glu	His 95	Arg
50	Ser	Tyr	Cys	Ser 100	Ala	Lys	Ala	Arg	Asp 105	Arg	His	Phe	Ala	Gly 110	Asp	Val
35	Leu	Gly	Tyr 115		Thr	Pro	Trp	Asn 120	Ser	His	Gly	Tyr	Asp 125	Val	Thr	Lys
	Val	Phe 130	Gly	Ser	Lys	Phe	Thr 135	Gln	Ile	Ser	Pro	Val 140	Trp	Leu	Gln	Leu
40	Lys 145	Arg	Arg	Gly	Arg	Glu 150	Met	Phe	Glu	Val	Thr 155	Gly	Leu	His	Asp	Val 150
45	Asp	Gln	Gly	Trp	Met 165	Arg	Ala	Val	Arg	Lys 170	His	Ala	Lys	Gly	Leu 175	His
Ŧ J	Ile	Val	Pro	Arg 180	Leu	Leu	Phe	Glu	Asp 185	Trp	Thr	Tyr	Asp -	Asp. 190	Phe	Arg
50	Asn	Val	Leu 195	Asp	Ser	Glu	Asp	Glu 200	Ile	Glu	Glu	Lėu	Ser 205	ГÀ2	Thr	Val
	Val	Gln 210	Val	Ala	Lys	Asn	Gln 215	His	Phe	Asp	Gly	Phe 220	Val	Val	Glu	Val
55	Trp 225	Asn	Gln	Leu	Leu	Ser 230	Gln	Lys	Arg	Val	Gly 235	Leu	Ile	His	Met	Leu 240
60	Thr	His	Leu	Ala	Glu 245	Ala	Leu	His	Gln	Ala 250	Arg	Leu	Leu	Ala	Leu 255	Leu

	Val	Ile	Pro	Pro 260	Ala	Ile	Thr	Pro	Gly 265	Thr	Asp	Gln	Leu	Gly 270	Mec	Phe .				
5	Thr	His	Lys 275	Glu	Phe	Glu	Gln	Leu 280	Ala	Pro	Val	Leu	Asp 285	Gly	Phe	Ser				
	Leu	Мес 290	Thr	Tyr	Asp		Ser 295	Thr	Ala	His	Gln	Pro 300	Gly	Pro	Asn	Ala		•	-	•
10	Pro 305	Leu	Ser	Trp	Val	Arg 310	Ala	Cys	Val	Gln	Val 315	Leu	Asp	Pro	Lys	Хаа 320				
15	Lys	Trp	Arg	Thr	Lys 325	Ser	Ser	Trp	Gly	Ser 330	Thr	Ser	Met	Kaa	Trp 335	Thr				
	Xaa	Arg	Xaa	Pro 340	Xaa	Asp	Ala	Arg	Хаа 345	Pro	Val	Val	Gly	Xaa 350	Arg	Xaa				
20	Ile	Gln	Xaa 355		Lys	Asp	His	Хаа 360		Arg	Met	Val	Leu 365		Ser	Lys				
	Pro	Gln 370															~	•		
25	(2)	INF	ORMA	TION	FOR	SEQ	ID	NO:	478:						•				-	
30					JENCE (A) ! (B) !	LENG! TYPE: TOPO!	TH: I : ami LCGY	39 ar ino a : lin	mino acid near	acio): 47	78:	~,						
35	Thr 1					ı Asp					Pro			: Asp	Thr 15	Pro				
40 `	Thr	: Met	: Arg	Thi 20		Phe	AST	le.	ı Lev 25		Leu	ı Ala	. Let	1 Ala 30		Ser				
	Pro	Val	L His		r .Thi	Le	ser			•								• .		
45	(2)) IN	FORM	ATIO	N FOI	R SE(O ID	NO:	479	:										
50					(B)	LENG TYPE TOPO	TH: : am LOGY	54 a ino : li	mino acid near	aci		0: 4	79 <u>:</u>			-		. · ·		
55		1			:	5				1	0 .				1					
				2	0	•			2	5			,	3	0	p Val			N.	ż
60	Ĺе	u Gl	у Ту	~ Va	l Th	r Pr	o Tr	عھ ج	n Se	r Hi	s Gl	y Ty	z As	p Va	1 Th	r Ly:	5			

40 45 35 Val Phe Gly Ser Lys Phe 50 5 (2) INFORMATION FOR SEQ ID NO: 480: 10 (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 52 amino acids (B) TYPE: amino acid (D) TOPOLOGY: linear (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 480: 15 Arg Glu Met Phe Glu Val Thr Gly Leu His Asp Val Asp Gln Gly Trp 10 Met Arg Ala Val Arg Lys His Ala Lys Gly Leu His Ile Val Pro Arg 20 20 25 Leu Leu Phe Glu Asp Trp Thr Tyr Asp Asp Phe Arg Asn Val Leu Asp 40 25 Ser Glu Asp Glu 50 30 (2) INFORMATION FOR SEQ ID NO: 481: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 56 amino acids (B) TYPE: amino acid 35 (D) TOPOLOGY: linear (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 481: His Phe Asp Gly Phe Val Val Glu Val Trp Asn Gln Leu Leu Ser Gln 40 Lys Arg Val Gly Leu Ile His Met Leu Thr His Leu Ala Glu Ala Leu 25 30 His Gln Ala Arg Leu Leu Ala Leu Leu Val Ile Pro Pro Ala Ile Thr 45 35 Pro Gly Thr Asp Gln Leu Gly Met 50 55 50 (2) INFORMATION FOR SEQ ID NO: 482: (i) SEQUENCE CHARACTERISTICS: 55 (A) LENGTH: 47 amino acids (B) TYPE: amino acid (D) TOPOLOGY: linear (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 482: 60 Asp Gly Phe Ser Leu Met Thr Tyr Asp Tyr Ser Thr Ala His Gln Pro

	1				5					10					15							
	Gly	Pro	Asn	Ala 20	Pro	Leu	Ser	Trp	Val 25	Arg	Ala	Cys	Val	Gln 30	Val	Leu		•				
5	Asp	Pro.	Lys 35	Kaa	Lys	Trp	Arg	Thr 40	Lys	Ser	Ser	Trip	Gly 45	Ser	Thr							
10	(2)	INFO	ORMA	rion	FOR	SEQ	ID N	io: 4	183:								٠.	•				
15				Ü	A) L B) T D) T	ENGT TPE: OPOL	H: 1 ami OGY:	52 a بن خر 1in	mino cid ear	aci		: 48	3:		-						· (-	
20	Glu,			Val										Asn	Glu 15			55 4	•		:	
	Thr	Lys	Ąsp	Ile 20	Lys	Glu	Gly	Ile	Pro 25	Leu	Pro	Thr	Lys	Ile 30	Leu	Val	÷		•			•
25	Lys	Pro	Asp 35	Arg	Thr	Phe	Glu	Ile 40	; Lys	Ile	Gly	Gln	Pro 45	Thr	Val	Ser						
30	Tyr	Phe 50		Lys	Ala	Ala	Ala 55	Gly	Ile	Glu	Lys	Gly 60	Ala	Arg	Gln	Th <u>r</u>						
	Gly 65	Lys	Glu	. Val	Ala	Gly 70	Leu	Val	Thr	Leu	Lys 75		Val	. Tyr	Glu	Ile 80	,			2		
35				: Lys	85	•				90				•	95							
				Val 100					105					110		-						
40			115					120					125									
45	-	130)	; Ala			135			GIn	. Lys	140		. Asp	· Leu	Ala					•	
	145		ı Git	ı Glu	. Ala	150	_	rys								•	<i>t</i> •	٠.	÷		•	
50	(2)	INE	FORM	YTION	FOF	SEÇ) ID	NO:	484:							•			-			
55		•			(A) : (B) ' (D) '	LENG Type Topo!	TH: : am LOGY	270 ; ino ; : li:	amin acid near	o ac:		D: 48	34:									
60	Ala 1		l Ty:	r Thr	יעד: פ		Glu	Lys	. Lys	Lys 10		p Thi	- Ala	a Ala	a Ser 13	Gly			N.	٠.	<i>:</i>	.:

	Tyr	Gly	Thr	Gln 20	Asn	Ile	Arg	Leu	Ser 25	Arg	Asp	Ala	Val	Lys · 30	Asp	Phe
5	Asp	Cys	Cys 35	Cys	Leu	Ser	Leu	Gln 40	Pro	Cys	His	qzA	Pro 45	Val	Val	Thr
10	Pro	Asp 50	Gly	Tyr	Leu	Tyr	Glu 55	Arg	Glu	Ala	Ila	Leu 60	Glu	Tyr	Ile	Leu
	His 65	Gln	Lys	Lys	Glu	Ile 70	Ala	Arg	Gln	Met	Lys 75	Ala	Tyr	Glu	Ļys	Gln' 80
15	Arg	Gly	Thr	Arg	Arg 85	Glu	Glu	Gln :	Lys	90 90	Leu	Gln	Arg	Ala	Ala 95	Ser
	Gln	ÇzA	His	Val 100	Arg	Gly	Phe	Leu	Glu 105	Lys	Glu	Ser	Ala	Ile 110	Val	Ser
20	Arg	Pro	Leu 115	Asn	Pro	Phe	Thr	Ala 120	Lys	Ala	Leu	Ser	Gly 125	Thr	Ser	Pro
25	qzA	Asp 130	Val	Gln	Pro	Gly	Pro 135	Ser	Val	Gly	Pro	Pro 140	Ser	Lys	Asp	Lys
	Asp 145	Lys	Val	Leu	Pro	Ser 150	Phe	Trp	Ile ;	Pro	Ser 155	Leu	Thr	Pro	Glu	Ala 160
30	Lys	Ala	Thr	Lys	Leu 165	Glu	Lys	Pro	Ser	A Ì g 170	Thr	Val	Thr	Cys	Pro 175	Mec
	Ser	Gly	Lys	Pro 130	Leu	Arg	Met	Ser	Asp 185	Leu	Thr	Pro	Val,	His 190	Phe	Thr
35	Pro	Leu	Asp 195	Ser	Ser	Val	qzA	Arg 200	Val	Gly	Leu	Ile	Thr 205	Arg	Ser	Glu
40	Arg	Tyr 210	Val	Cys	Ala	Val	Thr 215	Arg	Asp	Ser	Leu	Ser 220	Asn	Ala	Thr	Pro
	Cys 225	Ala	Val	Leu	Arg	Pro 230	Ser	Gly	Ala	Val	Val 235	Thr	Leu	Glu	Cys	Val 240
45	Glu	Lys	Leù		Arg 245			Met				Val	Thr	Gly	Asp 255	-
	Leu	Thr	Asp	Arg 260	qzA	Ile	Ile	Val	Leu 265	Gln	Arg	Gly	Gly	Thr 270		
50																
	(2)	INFO	ORMAG	MOIT	FOR	SEQ	ID 1	IO: 4	185 :							
55				: (ENCE A) L E) T D) T UENC	ENGT YPE : OPOL	H: 5 ami CGY:	4 am no a line	ino . cid ear	acid		· 48	ξ.			
60	T ∿~													His	G1 n	Luc
	- 2 -	~~~u	+ 2 +	سيني	-u. y	نباشت	A-4	1 1 T	200	سنب	± ¥ ±	4 ÷ =	لماحص		GT13	275

	1				5					10					15	
5	Lys	Glu	Ile	Ala 20	Arg	Gln	Met	Lys	Ala 25	Tyr	Glu	Lys	Gln	Arg 30	Gly	Thr
	Arg	Arg	G1u 35	Glu	Gln	Lys	Glu	Leu 40		Arg	Ala	Ala	Ser 45	Gln	Asp	His
10	Val	Arg 50	Gly	Phe	Leu	Glu									ū	
	(2)	INFO	OPMA:	FION	FOR	SEQ	ID 1	NO: 4	. 86							•
15			(i)		A) L	ENGT	H: 6	4 am	ino		s	•				
20			(xi)	-	D) T	OPOL	CGY :	no a lin PTIO	ear	EQ II	, D NO	: 49	6 :			
	Phe 1	Thr	Ala	Lys	Ala 5	Leu	Ser	Gly	Thr	Ser 10	Pro	Asp	Asp	Val	Gln 15	Pro
25	Gly	Pro	Ser	Val 20	Gly	Pro	Pro	Ser	Lys ,:25	Asp	Lys	Asp	Ļys	Val 30	Leu	Pro
30	Ser	Phe	-Т гр 35	Ile	Pro	Ser	Leu	Thr 40		Glu	Ala	Lys	Ala 45	Thr	Lys	Leu
	Glu	Lys 50	Pro	Ser	Arg	Thr	Val 55	Thr	Cys	Pro	Met	Ser 60		. Lys	Pro	Leu
35		•								-				٠		
40	(2)	INF	ORMA	TION	FOR	SEQ	ID	NO:	487:							
.0			(i)		(A) I	ENG!	TH: S	ERIS 6 am	ino		is					•
45			(xi)		(D) 7	ropoi	LOGY:	: lim	ear	EQ I	D NO): 48	37 :			
	1				. 5					10					15	
50				20	1				25					30)	Ser
55			35					40		Pro	Ser	: Gly	/ Ala 45		Val	Thr
	Let	: Glu 50	_	Val	. Glu	r rva	Leu 53								•	

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(2) 3	INFORMATION	FOR	SEO	IJ	NO:	438:
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(i)	EQUENCE CHARACTERISTICS:
	(A) LENGTH: 567 amino acids
	(B) TYPE: amino acid
	(D) TOPOLOGY: linear
(xi)	SEQUENCE DESCRIPTION: SEQ ID NO: 488:

Met Asp Thr Ser Glu Asn Arg Pro Glu Asn Asp Val Pro Glu Pro Pro 10 10 Met Pro Ile Ala Asp Gln Val Ser Asn Asp Asp Pro Glu Gly Ser 25 15 Val Glu Asp Glu Glu Lys Lys Glu Ser Ser Leu Pro Lys Ser Phe Lys Arg Lys Ile Ser Val Val Ser Ala Thr Lys Gly Val Pro Ala Gly Asn 20 Ser Asp Thr Glu Gly Gly Gln Pro Gly Arg Lys Arg Arg Trp Gly Ala Ser Thr Ala Thr Thr Gln Lys Lys Pro Ser Ile Ser Ile Thr Thr Glu 25 85 90 Ser Leu Lys Ser Leu Ile Pro Asp Ile Lys Pro Leu Ala Gly Gln Glu 105 . 30 Ala Val Val Asp Leu His Ala Asp Asp Ser Arg Ile Ser Glu Asp Glu 120 Thr Glu Arg Asn Gly Asp Asp Gly Thr His Asp Lys Gly Leu Lys Ile 135 35 Cys Arg Thr Val Thr Gln Val Val Pro Ala Glu Gly Gln Glu Asn Gly 150 155 Glm Arg Glu Glu Glu Glu Glu Lys Glu Pro Glu Ala Glu Pro Pro 40 170 Val Pro Pro Gln Val Ser Val Glu Val Ala Leu Pro Pro Pro Ala Glu 45 His Glu Val Lys Lys Val Thr Leu Gly Asp Thr Leu Thr Arg Arg Ser 200 Ile Ser Gln Gln Lys Ser Gly Val Ser Ile Thr Ile Asp Asp Pro Val 50 Arg Thr Ala Gln Val Pro Ser Pro Pro Arg Gly Lys Ile Ser Asn Ile 235 225 230 Val His Ile Ser Asn Leu Val Arg Pro Phe Thr Leu Gly Gln Leu Lys 55 245 250 Glu Leu Leu Gly Arg Thr Gly Thr Leu Val Glu Glu Ala Phe Trp Ile 260 255

Asp Lys Ile Lys Ser His Cys Phe Val Thr Tyr Ser Thr Val Glu Glu

			275					280					285			
5	Ala	Val 290	Ala	Thr	Arg	Thr	Ala 295	Leu	His	Gly	Val	Lys 300	_	Pro	Gln	Ser
	Asn 305	Pro	Lys	Phe	Leu	Cys 310	Ala	Asp	Tyr	Ala	Glu 315	Gln	Asp	Glu	Leu	Asp 320
10	Tyr	His	Arg	Gly ,	Leu 325	Leu	Val	Asp	Arg	Pro 330	Ser	Glu	Thr	Lys	Thr 335	Glu
	Glu _.	Gln	Gly	Ile 340	Pro	Arg.	Pro	Leu	His 345	Pro	Pro	Pro	Pro	Pro 350	Pro	Val
15	Gln	Pro	Pro 355	Gln	Hls	Pro	Arg	Ala 360	Glu	Glm	Arg	Glu	Gln 365	Clu	læg	Ala
20	Val	Arg 370	Glu	Gln	Trp	Ala	Glu 375	Arg	Glu	Arg	Glu	Met 380	C1ń	Arg	Arg	Glu
	Arg 385	Thr	Arg	Ser	Glu		Glu	Trp	Asp	Arg	Asp 395	Lys	Val	Arg	Glu	Gly 400
25	Pro	Arg	Ser	Arg	Ser 405	Arg	Ser	Arg	Xaa ,	Arg 410	Arg	Arg	Lys	Glu	Arg 415	Ala
	Lys	Ser	Lys	Glu 420	Lys	Lys	Ser	Glu	Ĺys 425	Lys	Glu	Lys	Ala	Gln 430	Glu	Glu
30	Pro	Pro	Ala 435	Lys	Leu	Leu	Asp	Asp 440	Leu	Phe	Arg	Lys	Thr 445	Lys	Ala	Ala
35	Pro	Cys 450	Ile	Tyr	dīī	Leu	Pro 455	Leu	Thr	Asp	Ser	Gln 460	Ile	Val	Gln	Lys
	Glu 465	Ala	Glu	Arg	Ala	Glu 470	Arg	Ala	Lys	Glu	Arg 475	Glu	Lys	Arg	Arg	Lys 480
40					485			Lys		490					495	-
			•	500				Arg	505					510	•	
45	Glu	Arg	Asp 515	Arg	Glu	Arg	Glu	Arg 520	Glu	Arg	Glu	Arg	Asp 525	Arg	Gly	çzA
50	Arg	چ <u>و</u> 530	_	Asp	Arg	Сſ'n	Arg 535	Asp	Arg	Glu	Arg	Gly 540	Arg	Glu	Arg	Asp
	Arg 545	Arg	yab	Thr	Ļys	Arg 550	His	Ser	Arg	Ser	Arg 555	Ser	Arg	Ser	Thr	Pro 560
55	Val	Arg	Asp	Arg	Gly 565	Gly	Arg						,			

_	•			() ()	A) L1 3) T 2) T	ength (PE : OPOLO	f: 51 amir CGY:	. ami no ac line	ino a cid ear	acids			·			
5		((xi)	SEQU	ENCE	DES	SCRIP	TION	1: SE	Q II	D. NO.	: 489	<i>;</i> :			
-	Gly (Cys	Asp	Ser	Cys 5	Pro	Pro	His	Leu	Pro 10	Arg	Gļu	Ala	Phe	Ala 15	Gln
10 -	Asp (Thr	Gln	Ala 20	Glu	Gly	Glu	Cys	Ser 25			Ala	Glu	Arg 30	Ala	Asp
15	Met (Cys	Pro 35	Asp [°]	Ala	Pro	Pro	Ser 40	Gl'n	Glu	Val	Pro	Glu 45	Gly	Pro	Gly
	Ala	Ala 50	Pro		•									·		
20	(2)	INFO	ORMAT	rion.	FOR	SEQ	ID N	IO: 4	190 :							
25				(A) L B) T D) T	ENGT: YPE : OPOL	H: 50 ami: OGY:	o am no a lin	ino cid ear	acid		: 49				
30	Pro 1	Gln	Leu	Pro	Ser 5	Cys	Gly	Arg	Pro	Trp	Pro	Gly	Thr	Ala	Ser 15	Val
	Phe	Gln	Ser	His 20	Thr	Gln	Gly	Pro	Arg 25	Glu	Asp	Pro	Asp	Pro , 30	Cys	Arg
35	Ala	Gln	Gly 35	Ser	Ala	Gly	Thr	His 40	Cvs	Pro	Ile	Ser	Leu 45	Ser	Pro	Pro
40	Arg	Gln 50												• • •		
45	(2)			TION SEQU	ENCE	CHA	RACT	ERIS	TICS							•
			(xi)	((E) T	YPE:	TH: 4 ami OGY: SCRI	no a	cid near): 49	1:			
50	Pro 1	GJĀ				Pro			•		Gly			· Phe	Phe	Pro
55	Arg	Ser	Leu	Gly 20		Val	·Leu	Pro	Pro 25		. Cys	: Gln	. Arg	Pro 30		Ala
	His	Ala	qeA . 35	Ser	Ser	Pro	Pro	Pro		Pro)					

	(2) .INFO	RMATI	ON F	FOR :	SEQ	ID N	0: 4	92:	,						
5		i) SE xi) S	(A (B (D) LE) TY) TO	NGTH PE: POLO	:: 84 amir XGY:	l ami no ac lina	no a id ar	cide		492				
10	Glu Asp 1	Leu L ;	ys I	Lys 5	Pro	Asp	Pro	Ala	Ser 10	Leu	Arg	Ala	Ala	Ser 15	Cys
15	Gly Glu	Gly L	ys I 20	Lys .	Arg	Lys	Ala	Cys 25	Lys	Asn	Cys-	Thr	Cys 30	Gly	Leu
	Ala Glu	Glu I 35	leu (Glu	Lys	Glu	Lys 40	Ser	Arg	Glu	Gln	Met 45	Ser	Ser	Gln
20	Pro Lys 50	Ser A	la (Cys	Gly	Asn 55	Cìa	Tyr	Leu	Gły	Asp 60	Ala	Phe	Arg	Cys
	Ala Ser 65	Cys I	Pro :	Γyτ	Leu 70	GJĀ	Met	Pro	Ala	Phe 75	Lys	Pro	Gly	Glu	Eys 80
25 .	Val Leu	Leu S	Ser					<i>:</i>							
30	(2) INFO	RMAT	ION I	FOR	SEQ	ID 1	10: 4	193 :							
30 35		ORMATI	EUQE 4) E)	NCE L) Li B) T	CHAI ENGT YPE: OPOL	RACTI H: 9 ami OGY:	ERIS O am no a lin	rICS ino cid ear	acid		: 49	3:	,		
35		(i) 5: (xi)	EQUE 4) 2) 1) SEQU	NCE A) LI B) T O) TO	CHAI ENGT YPE: OPOL E DE	RACT H: 9 ami OGY: SCRI	ERIS O am no a lin PTIO	rics ino cid ear N: S	acid EQ I	D NO			, Ala	Ser 15	Cys
	Glu Asp	(i) S (xi) Leu l	EQUE (A (E (C SEQU Lys	NCE A) LI B) T D) T IENCI Lys 5	CHAI ENGT YPE: OPOL E DE	RACT: H: 9 ami OGY: SCRI ASP	ERIS 0 am no a lin PTIO	rICS ino cid ear N: S:	EQ I Ser 10	D NO Leu	Arg	Ala		15	
35	Glu Asp 1	(i) S (xi) Leu :	EQUE (A (E SEQU Lys Lys 20	NCE A) LI B) T O) TO IENCI LYS 5 LYS	CHAI ENGT: YPE: OPOL E DE. Pro	RACTI H: 9 ami OGY: SCRI ASP	ERIS 0 am no a lin PTIO Pro	rICS ino cid ear N: S: Ala Cys 25	EQ I Ser 10 Lys	D NO Leu Asn	Arg Cys	Ala	Cys 30	Gly	Leu
35	Glu Asp 1 Gly Glu	(xi) Leu : Gly : Glu : 35	EQUE (A (E (E SEQU Lys Lys 20 Leu	NCE A) Li B) T ENCI Lys Lys Glu	CHAI ENGT YPE: OPOL E DE Pro Arg	RACT: H: 9 ami OGY: SCRI ASP Lys	ERIS 0 am no a lin prio. Pro Ala Lys 40	rics ino cid ear N: S: Ala Cys 25 Ser	EQ I Ser 10 Lys	D NO Leu Asn Glu	Arg Cys Gln	Ala Thr Met 45	Cys 30 Ser	Gly Ser	Leu
35	Glu Asp 1 Gly Glu Ala Glu Pro Lys	(xi) Leu Gly: Glu: SSer	EQUE (F (E SEQU Lys 20 Leu	INCE LYS LYS Glu Cys	CHAMENGT YPE: OPOL Pro Arg Lys	RACTI H: 9 ami OGY: SCRI Asp Lys Glu Asn 55	ERIS'S 0 ammon a linn prilo: Pro Ala Lys 40	rics ino cid ear N: S: Ala Cys 25 Ser	EQ I Ser 10 Lys Arg	D NO Leu Asn Glu	Arg Cys Gln Asp 60 Lys	Ala Thr Met 45 Ala	Cys 30 Ser Phe	Gly Ser	Leu Gln Cys

(2) INFORMATION FOR SEQ ID NO: 494:

(i) SEQUENCE CHARACTERISTICS:

```
(A) LENGTH: 34 amino acids
                    (B) TYPE: amino acid
                   (D) TOPOLOGY: linear
             (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 494:
 5
     Cys Gly Asn Cys Tyr Leu Gly Asp Ala Phe Arg Cys Ala Ser Cys Pro
     Tyr Leu Gly Met Pro Ala Phe Lys Pro Gly Glu Lys Val Leu Leu Ser
10
     Asp Ser
15
     (2) INFORMATION FOR SEQ ID NO: 495:
            (i) SEQUENCE CHARACTERISTICS:
20
                    (A) LENGTH: 25 amino acids
                    (B) TYPE: amino acid
                   (D) TOPOLOGY: linear
             (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 495:
25
     Ser Cys Gly Glu Gly Lys Lys Arg Lys Ala Cys Lys Asn Cys Thr-Cys
                                      . 10
                   5
     Gly Leu Ala Glu Glu Leu Glu Lys Glu
                  20
30
      (2) INFORMATION FOR SEQ ID NO: 496:
35
             (i) SEQUENCE CHARACTERISTICS:
                    (A) LENGTH: 21 amino acids
                    (B) TYPE: amino acid
                    (D) TOPOLOGY: linear
             (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 496:
40
      Ser Gln Pro Lys Ser Ala Cys Gly Asn Cys Tyr Leu Gly Asp Ala Phe
      Arg Cys Ala Ser Cys
45
        . 20
      (2) INFORMATION FOR SEQ ID NO: 497:
50
             (i) SEQUENCE CHARACTERISTICS:
                    (A) LENGTH: 17 amino acids
                    (B) TYPE: amino acid
                    (D) TOPOLOGY: linear
55
             (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 497:
      Arg Glu Ala Gly Gln Asn Ser Glu Arg Gln Tyr Val Ser Leu Ser Arg
                       5
                                         10
60
     Asp
```

-	(5) 111 0191111011 101. 000 10 110. 350.	
10	(i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 90 amino acids (B) TYPE: amino acid (D) TOPOLOGY: linear (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 498:	
15	Glu Ser Ser Gly Gln Ala Arg Thr Leu Ala Asp Pro Gly Pro 1 5 10	Gly Trp
	Pro Arg Gln Gln Gly Met Cys Phe Gly Ser Leu Thr Gly Leu 20 25 30	
20	Thr Pro His Gly Phe Leu Thr Val Ser Ala Glu Ala Asp Pro 35 40 45	Arg Leu
	Ile Glu Ser Leu Ser Gln Met Leu Ser Met Gly Phe Ser Asp 50 55 60	Glu Gly
25	Gly Trp Leu Thr Arg Leu Leu Gln Thr Lys Asn Tyr Asp Ils	e Gly Ala 80
30	Ala Leu Asp Thr Ile Gln Tyr Ser Lys His 85 90	•
	(2) INFORMATION FOR SEQ ID NO: 499:	
35	(i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 159 amino acids	
40	(B) TYPE: amino acid (D) TOPOLOGY: linear (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 499:	
70	Gln Glu Gly Ser Glu Pro Val Leu Leu Glu Gly Glu Cys Leu 1 5 10	Val Val
45	Cys Glu Pro Gly Arg Ala Ala Ala Gly Gly Pro Gly Gly Ala 20 25 30	
	Gly Glu Ala Pro Pro Gly Arg Val Ala Phe Kaa Ala Val Arg 35 40 45	g Ser His
50	His His Glu Pro Ala Gly Glu Thr Gly Asn Gly Thr Ser Gly 50 55 60	/ Ala Ile
55	Tyr Phe Asp Gln Val Leu Val Asm Glu Gly Gly Gly Phe Asp	Arg Ala 80
	Ser Gly Ser Phe Val Ala Pro Val Arg Gly Val Tyr Ser Phe 85 90	e Arg Phe 95
60	His Val Val Lys Val Tyr Asn Arg Gln Thr Val Gln Val Ser	

	Leu	neA	Thr 115	פֿבע	Pro	Val	Ile	Ser 120	Ala	Phe	Ala	As'n	Asp 125	Pro	qzA	Val
5	Thr	Arg 130	Glu	Ala	Ala	Thr	Ser 135	Ser	Val	Leu	Leu	Pro 140	Leu	ązĄ	Pro	Gly
10	Asp 145	yrg	Val	Ser	Leu	Arg 150	Leu	Arg	Arg	Gly	Каа 153	Ser	Thr	Gĺy	Trp	
	(2)	INF	ORMA'	TIÓN	FOR	SEQ	ID 1	NO: 5	500:							
15 20				(A) L B) T D) T	engt YPE : opol	H: 3 ami OGY:	2 am no a lin	ino . cid ear	acid		: \$0	0: -		-	
	Pro 1	Arg	Ser	Arg	Pro 5	Ala	Leu	Arg	Pro	Gly 10	Arg	Gln	Arg	Pro	Pro 15	Ser
25	His	Ser	Ala	Thr 20	Ser	Gly	Val	Leu	Arg 25 :	Pro	Arg	Lys	Lys	Pro 30	Asp	Pro
30														•	-	•
	(2)	INF	ORMA	TION	FOP.	SEQ	ID I	NO:	501:							
35				(A) L B) T D) T	ENGT YPE: OPOL	H: 3 ami OGY:	1 am no a lin	ino cid ear	acid		: 50	1:			-
40	Mec 1		Leu	Ile	Thr 5	Pro	Ser	Xaa	Lys	Leu 10	Thr	Phe	Xaa	Lys	Gly 15	Asn
45	Lys	Ser	Trp	Ser 20		Arg	Ala	Cys	Ser 25	Ser	Thr	Leu	Val	92A 0		
	(2)	INF	ORMA	TION	FOR	SEQ	ID :	NO:	502:							
50 ~				((A) T (E) T (C)	ENGI YPE : 1090:	: YEO	l am no a lin	ino cid ear	acid			*			
55	Gly			SEC Ser										Gly	Ser 15	Gln
		Pro	Cvs			**- 3			23		212	***	17 m 1	~~		Th:

	Cys Lys Lys Pro Leu Thr Asn Ser His Leu Glu Thr Glu Ala Gln Ser 35 40 45	
5	Ser Ser Leu	
10	(2) INFORMATION FOR SEQ ID NO: 503:	
10	(2) Its olders for the page in the state	
. 15	(i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 263 base pairs (B) TYPE: nucleic acid (C) STRANDEDNESS: double (D) TOPOLOGY: linear	
	(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 503:	
20	GCTTCGTGTC CAACCCTCTT GCCCTTCGCC TGTGTGCCTG GAGCCAGTCC CACCACGCTC	60
	GCGTTTCCTC CTGTAGTGCT CACAGGTCCC AGGACCGATG GCATTCCCTT TGCCCTGAGT	120
25	CTGCAGCGGG TCCCTTTTGT GCTTCCTTCC CCTCAGGTAG CCTCTCTCCC CCTGGGCCAC	180
27	TCCCGGGGGT GAGGGGGTTA CCCCTTCCCA GTGTTTTTTA TTCCTGTGGG GCTCACCCCA	240
	AAGTATTAAA AGTAGCTTTG TAA	263
30		
	-	
	(2) INFORMATION FOR SEQ ID NO: 504:	
35	(i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 263 base pairs (B) TYPE: nucleic acid (C) STRANDEDNESS: double (D) TOPOLOGY: linear	
40	(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 504:	
	GCTTCGTGTC CAACCCTCTT GCCCTTCGCC TGTGTGCCTG GAGCCAGTCC CACCACGCTC	. 60
45	GCTTCGTGTC CAACCCTCTT GCCCTTCGCC TGTGTGCCTG GAGCCAGTCC CACCACGCTC GCGTTTCCTC CTGTAGTGCT CACAGGTCCC AGCACCGATG GCATTCCCTT TGCCCTGAGT	· 60 120
45		120
	GCGTTTCCTC CTGTAGTGCT CACAGGTCCC AGCACCGATG GCATTCCCTT TGCCCTGAGT	120
45 50	GCGTTTCCTC CTGTAGTGCT CACAGGTCCC AGCACCGATG GCATTCCCTT TGCCCTGAGT CTGCAGCGGG TCCCTTTTGT GCTTCCTTCC CCTCAGGTAG CCTCTCTCCC CCTGGGCCAC	120 180
	GCGTTTCCTC CTGTAGTGCT CACAGGTCCC AGCACCGATG GCATTCCCTT TGCCCTGAGT CTGCAGCGGG TCCCTTTTGT GCTTCCTTCC CCTCAGGTAG CCTCTCTCCC CCTGGGCCAC TCCCGGGGGT GAGGGGGTTA CCCCTTCCCA GTGTTTTTA TTCCTGTGGG GCTCACCCCA	120 180

(i) SEQUENCE CHARACTERISTICS:

60

(A) LENGTH: 263 base pairs .

(B) TYPE: nucleic acid

	(C) STRANDEDNESS: double	
	(D) TOPOLCGY: linear	•
5	(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 505:	·
	GCTTCGTGTC CAACCCTCTT GCCCTTCGCC TGTGTGCCTG GAGCCAGTCC CACCACGCTC	60
	GCGTTTCCTC CTGTAGTGCT CACAGGTCCC AGCACCGATG GCATTCCCTT TGCCCTGAGT	120
10	CTGCAGCGGG TCCCTTTTGT GCTTCCTTCC CCTCAGGTAG CCTCTCTCCC CCTGGGCCAC	180
	TCCCGGGGGT GAGGGGGTTA CCCCTTCCCA GTGTTTTTTA TTCCTGTGGG GCTCACCCCA	240
15	AAGTATTAAA AGTAGCTTTG TAA	263
20	(2) INFORMATION FOR SEQ ID NO: 506:	
·	(i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 160 base pairs	
	(B) TYPE: nucleic acid	
25	(C) STRANDEDNESS: double (D) TOPOLOGY: linear	
	(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 506:	
30	TGGCTCACTG TCTTACAATC ACTGCTGTGG AATCATGATA CCACTTTTAG CTCTTTGCAT	60
	CTTCCTTCAG TGTATTTTG TTTTTCAAGA GGAAGTAGAT TTTAACTGGA CAACTTTGAG	120 '
	TACTGACATC ATTGATAAAT AAACTGGCTT GTGGTTTCAA	160
35		
	(2) INFORMATION FOR SEQ ID NO: 507:	
40	(i) SEQUENCE CHARACTERISTICS:	-
	(A) LENGTH: 292 amino acids (B) TYPE: amino acid	
	(D) TOPOLOGY: linear .	
45	(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 507:	
	Leu Asp Glu Leu Met Ala His Leu Thr Glu Met Gln Ala Lys Val Ala	
	1 5 10 15	رانها دونت المبديدوا ويوسدهم مده
50	Val Arg Ala Asp Ala Gly Lys Lys His Leu Pro Asp Lys Gln Asp His	
50	20 25 30	
	Lys Ala Ser Leu Asp Ser Met Leu Gly Gly Leu Glu Glu Leu Gln 35 40 45	
55		
رر	Asp Leu Gly Ile Ala Thr Val Pro Lys Gly His Cys Ala Ser Cys Gln 50 55 60	
	Lys Pro Ile Ala Gly Lys Val Ile His Ala Leu Gly Gln Ser Trp His	
	65 70 75 80	1 1 1 1 1 1

	Pro	Glu	His	Phe	Val 85	Çys	Thr	His	Çys	Lys 90	Glu	Glu	Ile	Gly	Ser 95	Ser
5	Pro	Phe	Phe	Glu 100	Arg	Ser	Gly	Leu	Хаа 105	Tyr	Cys	510	Asn	Asp 110	Tym	His
	Gln	Leu	Phe 115	Ser	510	Arg	Cys	Ala 120	Tyr	Cys	Ala	Ala	Pro 125	Ile	Leu	qaA
10	Lys	Val 130	Leu	Thr	Ala	Met	Asn 135	Gln	Thr	Trp	His	Pro 140	Glu	His	Phe	Phe
15	Cys 145	Ser	His	Cys	Gly	Glu 150	Val	Phe	Gly	Ala	Glu 155	Gly	Phe	His	Glu	Lys 160
	Asp	Lys	Lys	Pro	Tyr 165	Cys	Arg	Lys	Asp	Phe 170	Leu	Ala	Met	Phe	Ser 175	Pro
20	Lys	Cys	Gly	Gly 180	Cys	Asn	Arg	Pro	Val 185	Leu	Glu	Asn	Tyr	Leu 190	Ser	Ala
	Mec	Asp	Thr 195	Val	Trp	His	Pro	Glu 200	Cys	Phe	Val	Cvs	Gly 205	ązĄ	Cña	Phe
25	Thr	Ser 210	Phe	Ser	Thr	Gly	Ser 215	Phe	Phe ;	Glu	Leu	Asp 220	Gly	Arg	Pro	Phe
30	Cys 225	Glu	Leu	His	Tyr	His 230	His	Arg	Arg	Gly	Thr 235	Leu	Cys	His	Gly	Cys 240
•	Gly	Gln	Pro	Ile	Thr 245	Gly	Arg	Cys	Ile	Ser 250	Ala	Met	Gly,	Tyr	Lys 255	Phe
35	His	Pro	Glu	His 260	Phe	Val	Cys	Ala	Phe 265	Cys	Leu	Thr	Gln	Leu 270	Ser	Lys _.
	Gly	Ile	Phe 275	Arg	Glu	Gln	Asn	Asp 280	Lys	ĺpr	Tyr	Cys	Gln 285	Pro	Cys	Phe
40	Asn	Lys 290	Leu	Phe	,										÷	
45	(2)	INF	ORMA	TION	FOR	SEQ	ID I	NO: :	508:							
			(i)	(A) L	ENGT	H: 4	EFIS 3 am no a	ino		s					
50			(xi)	(D) T	OPOL	OGY:	lin PTIO	ear	EQ I	D NO	: 50	8 :			
55	Lys l	,	Ser	Leu	Asp 5	Ser	Met	Leu	Gly		Leu	Glu	Gln	Glu	Leu 15	Gln
- -	qzA	Leu	GJÅ	Ile 20	Ala	Thr	Val	Pro	Lys 25	Gly	His	Cys	Ala	Ser 30	Cys	Gln
60	Lys	Pro	Ile 35	Ala	Gly	Lys	Val	Ile 40	His	Ala	Leu					

5	(2)	INF	ORMAT	MOIT	FOR	SEQ	ID N	VO: 5	509 :								
_			(i)	SEQU	ENCE	CHAI	RACT	ERIS	TICS	:							
				(.	A) L	ENGT	H: 5	0 am	ino	acid	S						
						YPE:											
10			/ \			OPOL				EQ II	NO.	- 50	۵.				
10			(3(1)	352	OENC.	e de.	ocra.	-110	.v	LQ II	J NO						
	Cys	Pro	Asp	Asp	Tyr	His	Gln	Leu	Phe	Ser	Pro	Arg	Cys	Ala	Tyr	Cys	
	1				5					10					15		
15	7.7.5	212	D~-	71-	T 011	3.00	TVC	175 î	Lau	Thr	3 7 a	Mar	200	G) n	Th-	Т	
1.5	Aid	ALG.		20	nea	بيويم	בעם	. • • • •	25				دانود	30	1111	ייי	
	His	Pro		His	Phe	Phe	Cys		His	Civa	Glīv	Glu		Phe	Gly	Ala	
20			35					40					45				
~ 0	Glu	Gly															
		50											-			-	
25																	
د ـــ	(2)	INF	ORMAC	FION	FOR	SEQ	ID I	. : OP	510:								
	,								:								
			(i)	-		CHA											
30						ENGT YPE :				acid	S						
50					•	OPOL					•						
			(x <u>i</u>)							EQ II	OM C	: 51	0:				
			_	_			•	•		5 4 -		22-	,	Db -	5	3	
35	Asp 1	rys	rĀs	Pro	זעני דעני	Cys	Arg	rāz	ASP	Phe 10	Leu	ALA	wet	Pne	Ser 15	Pro	
-	-				,												
	Lys	Cys	Gly	Gly	CÀ2	Asn	Arg.	Pro		Leu	Glu	Asn	Tyr		Ser	Ala	_
				20					25					30			
40	Met	Asp	-د دارن	V=1	لتخيل	Fis	Pro	Glu	Cvs	Phe	Val	Cvs	Glv	· Asp	Cvs	Phe	
			35		125			40					45	:	-,-		
	Thr			Ser	Thr	GļĀ		Phe	Phe	Glu	Leu	_	Gly	Arg	Pro	Phe	
45		50					55					60					•
	Cys	Glu	Leu														
	65																
50																	:
	(2)	INF	ORMA	TION	FOR	SEQ	ID I	NO:	511:								
			(i)			CHA					_						
55						ENGI TYPE :				acid	S					. с	
						NPOL											
			(xi)							EQ I	סא ס	: 51	1:				
	_	٠.	۵,	_	٠.		63		~	-1.	~		W	~ 3.		•	
60	Cys 1	GTA	GID	Pro	Ile 5		GIÀ	AIG	C√S	Ile 10	∍er	ALA	met	CIÀ	Ту т 15	rvs	

	Phe	His	Pro	Glu 20	His	Phe	Val	Cys	Ala 25	Phe	Cys	Leu	Thr	Gln 30	Leu	Ser
5	Lys	Gly	Ile 35	Phe	Arg	Glu	Gln	Asn 40	Asp	Lys	Thr	Tyr	Cys 45	Gln		
					•										<i></i>	
10	(2)	INFO	RMAI	CION	FOR	SEQ	ID N	vo: 5	512:							
15			(i) _,	(. (:	A) L B) T	engt Ype:	H: 4 ami	ERIS 52 au no a 1in	mino cid		đs					•
			(ix)					PTIO		EQ II	OM C	: 51:	2 :			
20	Met 1	Gly	Ser	Ser	Gln 5	Ser	Val	Glu	Ile	Pro	Gly	Gly	Ğly	Thr	Glu. 15	Gly
	Tyr	His	Val	Leu 20	Arg	Val	Gln	Glu	Asn 25	Ser	Pro	Gly	His	Arg 30	Ala	Gly
25	Leu	Glu	Pro 35	Phe	Phe	Asp	Phe	Ile 40	Val	Ser	Ile	Asn	Gly 45	Ser	Arg	Leu
	nz.4	Lys 50	qzA	Asn	Asp	Thr	Leu . 55	Lys	, qzA	Leu	Leu	Lys 60	Xaa	Asn	Val	Glu
30	Lys 65	Pro	Val	Lys	Met	Leu 70	Ile	Tyr :	Ser	Ser	Lys 75	Thr	Leu ,	Glu	Leu	Arg 80
35	Glu	Thr	Ser	Val	Thr 85		Ser	Asn	Leu	90 91	Gly	Gly	Gìn	GJŸ	Leu 95	Leu
	Gly	Val	Ser	Ile 100	Arg	Phe	Cys	Ser	Phe 105	Asp	Gly	Ala	Asn	Glu 110	Asn	Val
40	īrp	His	Val 115	Leu	Glu	Val	Glu	Ser 120	Asn	Ser	Pro	Ala	Ala 125	Leu	Ala	Gly
	Leu	Arg 130	Pro	His	Ser	Asp	Tyr 135	Ile	Ile	Gly	Ala	Asp 140	Thr	Val	Met	Asn _.
45	Glu 145	Ser	Glu	qzA	Leu	Phe 150	Ser	Leu	Ile	Glu	Thr 155	His	Glu	Ala	Lys	Pro 160
50	Leu	Ľys	Leu	Tyr	Val 165	ī'n	Asn	Thr	Asp	Thr 170	Asp	Asn	Cys	Arg	Glu 175	Val
	Ile U	Ile	Lpi	Pro 180	Asn	Ser	Ala	Trp	.Gly 185	Gly	Glu	Gly	Ser	Leu 190	Gly	Cys
55	Gly	Ile	Gly 195	Ту <u>т</u>	GJA	īàī	Leu	His 200	_	Ile	Pro	Thr	Arg 205	Pro	Phe	Glu
	Glu	Gly 210	-	Lys	Ile	Ser	Leu 215		Gly	Gln	Mec	Ala 220	Gly	Thr	Pro	Ile
60	Thr	Pro	Leu	Lys	Asp	Gly	Phe	Thr	Glu	Val	Gln	Leu	Ser	Ser	Val	Asn

	225					230					235					240
5	520	Pro	Ser	Leu	Ser 245	Pro	Pro	Gly	Thr	Thr 250	Gly	Ile	Glu	Gln	Ser 255	Leu
J	Thr	Gly	Leu	Ser 260	Ile	Ser	Ser	Thr	Pro 265	Pro	Ala	Val	Ser	Ser 270	Val	Leu
10 .	Ser	Thr	Gly 275	Val	Pro	Thr	Val	Pro 280	Leu	Leu	Pro	Pro	Gln 285	Val	Asn	Gln
	Ser	Leu 290	Thr	Ser	Val	Pro	Pro 295	Mec	Asn	Pro	Ala	Thr 300	The	Leu	Pro	Gly
15	Leu 305.		Pro	Leu	Pro	Ala 310		Leu	Pro	Asn	Leu 315	Pro	Asn	Leu	Asn	Leu 320
20	Asn	Leu	Pro	Ala	Pro 325	His	Ile	Mec		Gly 330	Val	Gly	Leu	Pro	Glu 335	Leu
	Val	Asn	Pro	Gly 340	Leu	Pro	Pro	Leu	Pro 345	Ser	Met	Pro	Pro	Arg 350	A <i>s</i> n	Leu
25	Pro	Gly	Ile 355	Ala	Pro	Leu	Pro	Leu 360	Pro	Ser	Glu	Phe	Leu 365	Pro	Ser	Phe
	Pro	Leu 370	Val	Pro	Glu	Ser	Ser 375	Ser	Ala	Ala	Ser	Ser 380	Gly ·	Glu	Leu	Leu
30 .	Ser 385	Ser	Leu	Pro	Pro	Thr 390	Ser	Asn	Ala	Pro	Ser 395	ASP	Pro	Ala	Thr	Thr 400
35	Thr	Ala	Lys	Ala	Asp 405	Ala	Ala	Ser	Ser	Leu 410	Thr	Val	Asp	Val	Thr 415	Pro
	Pro	Thr	Ala	Lys 420	Ala	Pro	Thr	Thr	Val 425	Gĺu	qzA	Arg	Val	Gly 430	Asp	Ser
40	Thr	Pro	Val 435	Ser	Glu	Lys	Pro	Val 440	Ser	Ala	Ala	Val	Asp 445	Ala	Asn	Ala
	Ser	Glu 450	Ser	Pro			•					•				•
45	(2)	INFO	ORMAI	TION	FOR .	. SEQ	ID N	VO: 5	313:						•	
50			(i) ((xi)	() ()	A) L: B) T D) T	engt: YPE : OPOL	H: l ami CGY:	09 an no ao line	mino cid ear	aci		: 51:	3:			
55	Ser 1		Glu											Val	Leu 15	Arg
60	Val	Gln	Glu	Asn 20	Ser	Pro	Gly	His	Arg 25	Ala	Gly	Leu	Glu	Pro 30	Phe	Phe.

	Asp	Phe	Ile 35	Val	Ser	Ile	Asn	Gly 40	Ser	Arg	Leu	Asn	Lys 45	Asp	Asn	qeA.	:
.5	Thr	Leu 50	Lys	ÇZA	Leu	Leu	Lys 55	Xaa	Asn	Val	Glu	60	Pro	Val	Lys	Met	
	Leu 65	Ile	Tyr	Ser	Ser	Lys 70	Thr	Leu	Glu	Leu	Arg 75	Glu	Thr	Ser	Val	Thr 30	
10	Pro	Ser	Asn	Leu	Trp 85	Gly	Gly	Gln	Gly	90. Pen	Leu	Gly	Val	Ser	Ile 95	Arg	
15	Phe	Cys	Ser	Phe 100	Asp	Gly	Ala	Asn	Glu 105	Asn	Val	Trp	His				
	(2)	INF	ORMA!	FION	FOR	SEQ	ID I	NO: S	514:								
20 25			٠) (A) L B) T D) T	ENGT YPE: OPOL	H: 1 ami OGY:	ERIS 45 a no a lin PTIO	mino cid ear	aci		: 51	4 :				
	Glu 1	Ser	Asn	Ser	Pro · 5	Ala	Ala	Leu	Ala ,~	Gly 10	Leu	Arg	Pro	His	Ser 15	Asp	
30	· Tyr	Ile	Ile	Gly 20	Ala	Asp	Thr	Val	Met 25	Asn	Glu	Ser	Glu	Asp 30	Leu	Phe	
			35					Ala 40	. •				45				
35		50					55		•			60	-		*		
40	Ala 65	Trp	Gly	Gly	Glu	Gly 70		Leu	Gly	Cys	Gly 75		Gly	Tyr	Gly	80 Tyr	
					85			Pro		90					95		
45	Leu	Pro	Gly	Gln 100		Ala	. Gly	Thr	Pro 105		Thr	Pro	Leu	Lys 110		Gly	
	Phe	Thr	113		. Glm	Leu	: Ser	Ser 120		. Asn	Pro	Pro	Ser 125		. Ser	Pro	
50	Pro	Gl _y		Thr	: Gly	· Ile	: Glu 135	Gln	Ser	Leu	Thr	Gly 140		Ser	Ile	Ser	
55	Ser 145																
	(2)	IN	FORM	ATION	I FOF	R SEQ	Q ID	NO:	515:	:							

(i) SEQUENCE CHARACTERISTICS:

. 5			(xi)	(B) T	YPE: OPOL	ami :CGY	.45 a .no a lin PTIO	cid ear			: 51	S :						
ر	Glu 1	Ser	Asn	Ser	·Pro 5		Ala	Leu	Ala	Gly 10		Arg	Pro	His	Ser 15	Asp			
10	Ţyr	Ile	Ile	Gly 20		Asp	Thr	Val	Met 25	Asn	Glu	Se∵	Glu	qaA 06	Leu	Phe			
	Ser	Leu	Ile 35	Glu	Thr	His	Glu	Ala 40	ŗňa	Pro	Leu	Lys	Leu 45	Tyr	Val	TYT			
15	Asn	Thr 50		Thr	Asp	`Asn	Cys 55		Glu	Val	Ile	Ile 60	Thr	Pró	Asn	Ser			
20	Ala 65	Trp	Gly	Gly	Glu	Gly 70	Ser	Leu	Gly	Cys	Gly 75	Ile	Gly	Tyr	Gly	Tyr 80			
					85					90				Lys	95	-		•	
25	-			100					105		•			Lys 110	~				
20			115					120					125	Leu					
30		Gly 130	Thr	Thr	Gly	Ile	Glu 135	Gln	Ser	Leu	Thr	Gly 140	Leu	Ser	Ile	Ser			
35	Ser 145					•			٠			,		•		-			
40	(2)			SEQU	ENCE	CHA	RACTI	NO: S ERIST	rics		- 1~	•							
45			(xi)	()	B) T	YPE: OPOL	ami: OGY:	no a lin PTIO	cid ear			: 51	ō: ·		•				
	Arg 1	Ile	Pro	Thr	Arg 5	Pro	Phe	Glu	Glu	Gly 10	Lys	Lys	Ile	Ser	Leu 15	Pro			
50	GJÀ	Gln	Met	Ala 20	Gly	Thr	Pro	Ile	Thr 25	Pro	Leu	Lys `	Asp	Gly 30	Phe	Thr	٠.		
	Glu	Val	Gln 35	Leu	Ser	Ser	Val	Asn 40	Pro	Pro	Ser	Leu	Ser 45	Pro	Pro	Gly			
55	Thr	Thr 50	Gly	Ile	Glu	Gln	Ser 55	Leu	Thr	Gly	Leu	Ser 60	Ile	Ser	Ser	Thr			
60	Pro 65	Pro	Ala	Val	Ser	Ser 70	Val	Leu	Ser	Thr	Gly 75	Val	Pro	Thr	Val	80 80			

	Leu	Leu	Pro	Pro	Gln 85	Val	Asn	Gln	Ser	Leu 90	Thr	Ser	Val	Pro	Pro 95	Met	
5	Asn	Pro	Ala	Thr 100	Thr	Leu	Pro	Gly	Leu 105	Mec	Pro	Leu	Pro	Ala 110	Gly	Leu	
	Pro	Asn	Leu 115	Pro	Asn	Leu	Asn	Leu 120	Asn	Ļeu	Pro	Ala	Pro 125	His	Ile	Mėt	
10	Pro	Gly 130	Val	Gly	<u>r</u> en	Pro	Glu 135	Leu	Val	Asn	Pro	Gly 140	Leu	Pro	Pro	Leu	
15	Pro 145	Ser	Met	Pro	Pro	Arg 150	Asn	<i>:</i>				•					
	(2)	INF	ORMA'	rion	FOR	SEQ	ID I	.vo: :	517 :								
20				(A) L B) T D) T	ENGT YPE : OPOL	H: 1 ami OGY:	09 a no a lin	mino cid .ear	aci			•	•			
25				SEQ													
	Pro 1	_	Leu	Pro	Pro 5	Leu	Pro	Ser	Met	Pro 10	Pro	Arg	Asn	Leu	Pro 15	Gly	
30	Ile	Ala	Pro	Leu 20		Leu	Pro	Ser	Glu 25		Leu	Pro	Ser	Phe 30	Prò	Leu	
	Val	Pro	Glu 35	Ser	Ser	Ser	Ala	Ala 40	Ser	Ser	Gly	Glu	Leu 45	'Leu	Ser	Ser	
35		Pro 50		Thr	Ser	Asn	Ala 55		Ser	Asp	Pro	Ala 60	Thr	Thr	Thir	Ala	
40	Lys 65		Asp	Ala	Ala	Ser 70		Leu	Thr	Val	Asp 75		Thr	Pro	Pro	Thr 80	
*	Ala	Lys	: Ala	. Pro	Thr 85		Val	Glu	. Asp	Arg 90		Gly	Asp	Ser	Thr 95	Pro	
45	Val	. Ser	Glu	100		Val	Ser	: Ala	105		Asp	Ala	Asn				
50	(2)	İNE	FORM	AOIT.	I FOF	SEQ	ID,	NO;	518:								
			(i)		(A) : (B) :	LENG TYPE	ru: : am	rERIS 93 ar ino a : lir	mino acid		is						
55			(xi) SE						SEQ :	ID N	D: 50	L8:				
	_	e Ty:			L Phe		y His	s The	Ala	a Gly		ı Lys	Pro	Glu	ı Val	Ser	
60	~-	- Dh	a C1.	. >		. A	, Se	- (~,,,,	2 2 7 :	a Δ	t Xas	. Ya:	· Yaa	. Vas	Yaz	Yaa	

				20					25					30		
5	Xaa	Kaa	Xaa 35	Xaa	Хаа	Xaa	Trp	Ile 40	Phe	Gly	Val	Leu	His 45	Val	Val	His
5	Ala	Ser 50	Val	Val	Thr	Ala	Tyr 55	Leu	Phe	Thr	Val	Ser 50	Asn	Ala	Phe	Gln
10	Gly 65	Met	Phe	Ile	Phe	Leu 70	Phe	Leu	Cys	Val	Leu 75	Ser	Arg	Lys	Ile	Gln 80
	Glu	Glu	Tyr	Tyr	Arg 85	Leu	Phe	Lys	Asn	Val 90	Pro	Çys	Cys			
15				-				:								
	(2)	INF	ORMAC	NOIT	FOR	SEQ	ID I	NO: 5	519:							
20				(A) L B) T D) T	engt YPE : OPOL	H: 5 ami OGY:	ERIS 5 am no a lin PTIO	ino cid ear	acid		: 51	9:	÷		
25	Trp 1	Ile	Phe	Gly	Val 5	Leu	His	Val	Val	His 10	Ala	Ser	Val	Val	Thr 15	Ala
30	Tyr	Leu	Phe	Thr 20	Val	Ser	Asn	Ala	Phe 25	Gln	Gly	Met	Phe	Ile 30	Phe	Leu
	Phe	Leu	Cys 35	Val	Leu	Ser	Arg	Lys 40	Ile	Gln	Glu	Glu	Tyr 45	Tyr	Arg	Leu
35	Phe	Lys 50		Val	Pro	Cys	Cys 55									`
40	(2)	INF						NO:		:	`					
45			(xi)	· (B) T	YPE: OPOL	ami OGY :	0 am no a lin PTIO	cid ear			·: 52	0:		-	
	Ala 1		Thr	Arg	Ile 5		Pro	Gly	qzA	Trp 10	Val	Ile	Asn	Val	Thr 15	Ala
50	Val	Ser	Phe	Ala 20		Lys	Thr	The	Ala 25		Phe	Phe	Xaa	His 30		Ser
55	Pro	Pro	Ser 35		Gly	Asp	Gln	Ala 40		Thr	Ąsp	Pro	Gly 45		Gln	Arg
<i>33</i>	Arg	As <u>=</u> 50														

	(2) INFORMATION FOR SEQ ID NO: 521:	
5	(i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 27 amino acids (B) TYPE: amino acid (D) TOPOLOGY: linear (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 521:	
10	Leu Gln Glu Val Asn Ile Thr Leu Pro Glu Asn Ser Val Trp Tyr Glu 1 5 10 15	
	Arg Tyr Lys Phe Asp Ile Pro Val Phe His Leu 20 . 25	
15		
	.(2) INFORMATION FOR SEQ ID NO: 522:	
20 .	(i) SEQUENCE CHAPACTERISTICS: (A) LENGTH: 110 amino acids (B) TYPE: amino acid (D) TOPOLOGY: linear (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 522:	
25	Met Gln Gly Ser Gly Ser Gln Phe Arg Ala Cys Leu Cys Leu Cys 1 5 10 15	•
30	Phe Ser Cys Pro Cys Ser Pro Gly Gly Pro Arg Trp Asn Ser Arg Gln 20 25 30	·
	Gly Gly Arg Arg Phe Pro Lys Thr Cys Arg Ala Ile Ser Gln Asn Leu 35 40 45	
35	Val Phe Lys Tyr Lys Thr Phe Cys Pro Val Arg Tyr Met Gln Pro His 50 55 60	
	Arg Ser Ser Leu Cys Leu His Phe Thr Ser Tyr Val Phe Ile Leu Ser 65 70 75 80	
40	Thr Trp Gly Ser Leu Arg Thr Tyr Ser Thr Asp Leu Lys Lys Lys Lys 95	
45	Lys Asn Ser Arg Gly Gly Pro Val Pro Ile Arg Pro Lys Ser . 100 105 110	
	(2) INFORMATION FOR SEQ ID NO: 523:	
50	(i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 99 base pairs (B) TYPE: nucleic acid (C) STRANDEDNESS: double	
55	(D) TOPOLOGY: linear	
	(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 523:	
	TAGCATGTAG CCAGTCGAAT AACNTATAAG GACAAAGTGG AGTCCACGCG TGCGGCCGTC	60
60	PACACTACTE CAMPACCACA CTACAACTATT CACAACCAC	0.0

5	(2)	INF	ORMAI	NOIT	FOR-	SEQ	ID N	NO: 5	524:							
			(i) :	()	A) L B) T D) T	enct YPE : OPOL	H: 5 ami: OGY:	l am no a lin	ino cid ear	acid		: 52	4:			
15	Met	Gln	Gly	Ser	Gly 5	Ser	Gln	Phe	Arg	Ala 10	CAs	Leu	Lau	Cys	Leu 15	Cys
-	Phe	Ser	Cys	Pro 20	Cys	Ser	Bīo	Gly	Gly 25	Pro	Arg	Trp	Asn	Ser 30	Arg	Gln
20	Gly	Gly	Arg. 35	Arg	Phe	Pro	ГÁЗ	Thr 40		Arg	Ala	Ile	Ser 45	Gln'	neA	Leu
	Val	Phe 50	Lys													
25				•												
30	(2)	INF	ORMA:	SEQUI	ENCE	CHA		eris	rics		~					•
, 0			(xi)	C	B) T D) T	YPE: OPOL	ami OGY:	no a lin	cid ear		•	: 52	5 :	,		
35																
רו					Mat	~ C 3 ~	PYO	U : ~	$\Delta \sim \Box$	Car	Ser	1.011	C+10			
	Pro 1	Val	Arg	lyr	. 5	GIII		ut=2		10		-		reu	15	Pne
10	1				. 5					10			-	Arg 30	15	
	1 Thr	Ser	Tyr	Val 20	. 5 Phe	Ile	Leu	Ser	Thr 25	10 Trp	Gly	Ser	Leu	Arg	15 Thr	Tyr
	1 Thr Ser	Ser Thr	Tyr	Val 20 Leu	. 5 Phe Lys	Ile Lys	Leu	Ser Lys	Thr 25	10 Trp	Gly	Ser	Leu Gly	Arg 30	15 Thr	Tyr
1 0	Thr Ser	Ser Thr Ile 50	Tyr Asp 35	Val 20 Leu Pro	. 5 Phe Lys Lys	Ile Lys Ser	Leu	Ser Lys 40	Thr 25 Lys	10 Trp	Gly	Ser	Leu Gly	Arg 30	15 Thr	Tyr
10 15	Thr Ser	Ser Thr Ile 50	Asp 35 Arg ORMA	Val 20 Leu Pro FION (((((((((((((((((((Phe Lys Lys FOR FOR ENCE A) L B) T D) T	Ile Lys Ser SEQ CHA ENGT YPE:	Leu Lys ID 1 FACT H: 3 ami	Ser Lys 40 WO::	Thr 25 Lys 526: TICS ino cid ear	10 Trp Asn : acid	Gly Ser	Ser	Leu Gly 45	Arg 30	15 Thr	Tyr
10 15	Thr Ser Pro	Thr Ille 50	Asp 35 Arg ORMA(i)	Vall 20 Leu Pro FION (((SEQU	Phe Lys Lys FOR A) L B) T D) T UENC	Ile Lys Ser SEQ CHA ENGT YPE: OPOL	Leu Lys ID 1 FACT: H: 3 ami CGY: SCRI	Lys 40 WO: :	Thr 25 Lys Lys 526: TICS ino cid ear N: S	10 Trp Asn : acid	Gly Ser	Ser Arg	Gly 45	Arg 30	Thr	Tyr
10 15	Thr Ser Pro	Thr Ille 50	Asp 35 Arg ORMA(i)	Vall 20 Leu Pro SEQUI ((SEQUI SEQUI)	Phe Lys Lys FOR A) L B) T D) T UENC	Ile Lys Ser SEQ CHA ENGT YPE: OPOL	Leu Lys ID 1 FACT: H: 3 ami CGY: SCRI	Lys 40 WO: :	Thr 25 Lys Lys 526: TICS ino cid ear N: S	10 Trp Asn : acid	Gly Ser	Ser Arg	Gly 45	Arg 30	Thr	Tyr

				20					25					30;				
	Pro 1	Lys	Tyr 35	Ala ·	Gly	Leu								`			• .	
5																		
	(2)	INFO)FMAT	'ion	FOR	SEQ	ID N	io: 5	27:									
10				() ()	A) Li B) T D) T	ENGTI YPE : OPOLO	i: 1: ami: CGY:	sl ar no ac line		acio		: 527	7 :		•			
15	Met 1	Pro	Arg	Lys	Thr 5	Ser	Lys	Cys	Arg	Gln 10	Leu	Leu	Cys	Ser	Gly 15	Äla		
20	Ser	Arg	Asn	Ala .20	Asp	Thr	Ala	Ala	Arg 25	Gln	Ser	Thr	Cys	Ser 30	Ser	His		
	Arg	Pro	Pro 35	Gly	Lys	Ile	Pro	Ser 40	Leu	Gly	PTO.	Arg	Arg 45	Xaa	Pro	Gly		
25 .	Cys	Xaa 50	Ser	Val	Pro	Ser	Ser .55	Arg	Gly	Glu	Gln	Ser 60	Thr	Gly	Ser	Pro		
30	Ala 65	Ala	Pro	Arg	Cys	Gly 70	Arg	Arg	Asp	Ala	His 75	Arg	Gly	Leu	Pro	Gly 80		
50	Gly	Ala	Ala	Met	Thr 85	Pro	Gly	Asp	Thr	T rp 90	Ala	Ser	Phe	Asn	95 95	Arg.		
35	Ala	Gly	His	Ser 100		Ser	Gln	Gly	Glu 105	Gly	Gln	Glu	Ser	Ser 110	Gly	Ala		
	Ser	Arg	Gln 115		Arg	His	Pro	Val 120	Ser	His	Trp	Val	Glu 125		Gln	Arg		
40	Glu	Ala 130		Gly	Ala	Pro	Arg 135		Ser	Ser	Ala	Gly 140		Val	Lys	Val.		
45	Ala 145	Ala	Thr	Thr	Glu	Arg 150		Pro	Glu	Phe	Lys 155		. Lys	Thr	Gly	Lys 160		
	Ala									<u>-</u>							_	
50	(2)	INF	FORM	MOIT	, FOF	R SEC	Q ID	NO:	528 :									
55					(A) (B) (D)	LENG TYPE TOPO	TH: : am LOGY	88 a ino : li	STIC: mino acid near ON:	aci): 5:	28: .					-
60	Cys 1		r Gly	y Ala		r Arg	g Ası	n Ala	a Ası	Thi 10		a Ala	a Arg	Glr	n Ser 13	Thr		

	Суѕ	Ser	Ser	His 20	Arg	Pro	Pro	Gly	Lys 25	Ile	Pro	Ser	Leu ·	30 30	Pro	Arg
5	Arg	Xaa	Pro 35	Gly	Cys	Kaa	Ser	Val 40	Pro	Ser	Ser	Arg	Gly 45	Glu	Gln	Ser
10	Thr	Gly 50	Ser	Pro	Ala	Ala	Pro 55	Arg	Cys	Gly	Arg	Arg 60	Asp	Ala	His	Arg
10	Gly 65	Гел	Pro	Gly	Gly	Ala 70	Ala	Met,	Thr	Pro	Gly 75	Asp	Thr	Trp	Ala	Ser 80
15	Phe	Asn	Pro	Arg	Ala 85	Gly	His	Ser :								
20	(2)	INF		TION				. •				•				
			(1)	(A) L B) T		H: 5 ami	9 ал .no a							-	
25			(xi)	SEQ	UENC	E DE	SCRI	PTIO	N: S	EQ I	D NO	: 52	9 :			
	Gln 1		Glu	Gly	Gln 5		Ser	Ser	Gly	Ala 10	Ser	Arg	Gln	Asp	Arg 15	His
30	Pro	Val	Ser	His 20		Val	Glu	Arg	Gln 25	Arg	Glu	Ala	Trp	Gly 30	Ala	Pro
35	Arg	Ser	Ser 35		Ala	Gly	Gly	Val 40		Val	Ala	Ala	Thr 45	Thr	Glu	Arg
	Glu	Pro 50		Phe	Lys	Ile	Lys 55		Gly	Lys	Ala					
40	(2)	INF	ORMA	MOIT	FOR	. SEQ	ID.	NO:	530:							• •
45					(A) I (B) I (D) I	LENGT TYPE TOPOI	TH: : : am: LCGY	235 a ino a : lir		aci		o: 53	30 <u>:</u>		* ,	
50		: Se:	Pro	Arg	7 1 Tyr		Gly	, GJŽ	Pro	Arg 10		Pro	Leu	Arg	Ile 15	Pro
	Ası	n Glr	n Ala	a Leu 20		/ Gly	val	. Pro	Gly 25		: Glr	n Pro	Leu	Leu 30		Ser
55	Gly	y Me	2 Ası 3:		Thi	: Arg	g Glr	Gl:		/ His	Pro) Asr	Met 49		· Gly	. Pro
60	Me	5 Gl:		g Met	: Thr	r Pro	92° 55		g Gly	/ Met	. Val	60		ı Gly	Pro	Gln

•	Asn 65	Tyt	Gly	Gly	Ala	Met 70	Arg	Pro	Pro	Leu	Asn 75	Ala	Leu	Gly	Gly	Pro 80				
5	Gly	Met	Pro	Gly	Met 85	Asn	Mec	Gly	Pro	Gly 90	Gly	Gly	Arg	21 0	T≍p 95	Pro				
	Asn	Pro	Thr	Asn 100	Ala	Asn	Ser	Ile	Pro 105	Tyr	Ser	Ser	Ala	Ser 110	Pro	Gly				
10	Asn	Tyr	Val 115	Gly	Pro	Pro	Gly	Gly 120	Gly	Gly	Pro	Pro	Gly 125	Thr	Pro	Ile				
15	Met	Pro 130	Ser	Pro	Ala	Asp	Ser 135	Thr	Asn	Ser	Gly	Asp 140	Asn	Met	Tyr	Thr				
	Leu 145		Asn	Ala	Val	Pro 150	Pro	Gly	Pro	Asn	Arg 155	Pro	Asn	Phe	Pro	Met 160				
20	_				165	_		Met		170					175					
25				130	,			.Gly	185					190						
25			195					Ser 200	1				205	-						
30		210					215	Gly				Asn 220	Pro	Phe	Gin	Ser				
	225	ser	lyr	Ser	Pro	230	Mec	Thr	mec	ser	235									
3 <i>5</i>	(2)	INF	ORMA'	rion	FOR	SEQ	ID 1	NO: :	531:							•				
40				(A) L B) T D) T	ENGI YPE : OPOL	H: 1 ami CGY:	EPIS 14 a no a lin PTIO	mino cid ear	aci		: 53	1:						,	
45	Met 1		Pro	Arg	Tyr 5		Gly	Gly	Pro	Arg 10		Pro	Leu	Arg	Ile 15	Pro				
	Asn		Ala	Leu 20	-	Gly	Val	Pro	Gly 25	Ser	Gln	Pro	Leu	Leu 30	Pro	Ser				
50	Gly	Met	Asp 35		Thr	Arg	Gln	Gln 40	Gly	His	Pro	Asn	Met 45	_	Gly	Pro				
55	Met	Gln 50	_	Met	Thr	510	Pro 55	Arg	Gly	Met	Val	PT0 60	Leu	Gly	Pro	Gln				
	Asn 65		Gly	GIY	Ala	Мес 70		Pro	Pro	Leu	Asn 75	Ala	Leu	Gly	Gly	P <u>r</u> o 80				
60	Gly	Mec	Pro	Gly	Met 85		Met	Gly	Pro	Gly 90	Gly	Gly	Arg	Pro	Ттр 95	Pro		<i>\$</i> 1		

•	Asn Pro Thr Asn Ala Asn Ser Ile Pro Tyr Ser Ser Ala Ser Pro Gly 100 105 110	
5	Asn Tyr	
10	(2) INFORMATION FOR SEQ ID NO: 532:	
15	(i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 81 amino acids (B) TYPE: amino acid (D) TOPOLOGY: linear (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 532:	
20	Leu Asn Ala Leu Gly Gly Pro Gly Met Pro Gly Met Asn Met Gly Pro 1 5 10 15	
	Gly Gly Gly Arg Pro Trp Pro Asn Pro Thr Asn Ala Asn Ser Ile Pro 20 25 30	
25	Tyr Ser Ser Ala Ser Pro Gly Asn Tyr Val Gly Pro Pro Gly Gly Gly 35 40 45	,
	Gly Pro Pro Gly Thr Pro Ile Mét Pro Ser Pro Ala Asp Ser Thr Asn 50 55 60	:
30	Ser Gly Asp Asn Met Tyr Thr Leu Met Asn Ala Val Pro Pro Gly Pro 65 70 75 80	
35	Asn	
	(2) INFORMATION FOR SEQ ID NO: 533:	
40	(i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 70 amino acids (B) TYPE: amino acid (D) TOPOLOGY: linear	
45	(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 533:	
.5	Gly Pro Met Gly Gly Leu Gly Gly Met Glu Ser His His Met Asn Gly 1 5 10 15	•
50	Ser Leu Gly Ser Gly Asp Met Asp Ser Ile Ser Lys Asn Ser Pro Asn 20 25 30	1
	Asn Met Ser Leu Ser Asn Gln Pro Gly Thr Pro Arg Asp Asp Gly Glu 35 40 45	i
55	Met Gly Gly Asn Phe Leu Asn Pro Phe Gln Ser Glu Ser Tyr Ser Pro 50 55 60)
60	Ser Met Thr Met Ser Val 65 70	

```
(2) INFORMATION FOR SEQ ID NO: 534:
5
           (i) SEQUENCE CHARACTERISTICS:
                  (A) LENGTH: 14 amino acids
                  (B) TYPE: amino acid
                  (D) TOPOLOGY: linear
           (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 534:
10
     Thr Cys Glu His Ser Ser Glu Ala Lys Ala Phe His Asp Tyr
      1 5 10
15
     (2) INFORMATION FOR SEQ ID NO: 535:
           (i) SEQUENCE CHARACTERISTICS:
                  (A) LENGTH: 59 amino acids
20
                  (B) TYPE: amino acid
                (D) TOPOLOGY: linear
            (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 535:
     Gln Ala Phe Val Leu Leu Ser Asp Leu Leu Ile Phe Ser Pro Gln
25
             5 10
     Met Ile Val Gly Gly Arg Asp Phe Leu Arg Pro Leu Val Phe Phe Pro
                     25
30
     Glu Ala Thr Leu Gln Ser Glu Leu Ala Ser Phe Leu Met Asp His Val
     Phe Ile Gln Pro Gly Asp Leu Gly Ser Gly Ala
35
     (2) INFORMATION FOR SEQ ID NO: 536:
40
         (i) SEQUENCE CHARACTERISTICS:
                  (A) LENGTH: 43 amino acids
                   (B) TYPE: amino acid
                  (D) TOPOLOGY: linear
            (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 536:
45
     Ala Cys Ser Tyr Leu Leu Cys Asn Pro Glu Phe Thr Phe Phe Ser Arg
     Ala Asp Phe Ala Arg Ser Gln Leu Val Asp Leu Leu Thr Asp Arg Phe
50
                 20
     Glm Glm Glu Leu Glu Glu Leu Leu Glm Val Gly
55
     (2) INFORMATION FOR SEQ ID NO: 537:
            (i) SEQUENCE CHARACTERISTICS:
```

(A) LENGTH: 35 amino acids

	(B) TYPE: amino acid (D) TOPOLOGY: linear (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 537: 5 Gln Lys Gln Leu Ser Ser Lau Arg Asp Arg Met Val Ala Phe Cys Glu 1 5 10 15														
.5	Leu Cys Gln Ser Cys Leu Ser Asp Val Asp Thr Glu Ile Gln Glu Gln 20 25 30														
10	· .														
	Val Ser Thr 35														
15	(2) INFORMATION FOR SEQ ID NO: 538:														
20	(i) SEQUENCE CHARACTERISTICS: (A) LEMGTH: 27 amino acids (B) TYPE: amino acid														
•	(D) TOPOLOGY: linear (Xi) SEQUENCE DESCRIPTION: SEQ ID NO: 538:														
25	Gln Val Ile Leu Pro Ala Leu Thr Leu Val Tyr Phe Ser Ile Leu Trp 1 10 15														
•	Thr Leu Thr His Ile Ser Lys Ser Asp Ala Ser 20 25														
30	(2) INFORMATION FOR SEQ ID NO: 539:														
35	(i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 31 amino acids (B) TYPE: amino acid (D) TOPOLOGY: linear (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 539:														
40	Ser Thr His Asp Leu Thr Arg Trp Glu Leu Tyr Glu Pro Cys Cys Gln 1 10 15														
45	Leu Leu Gln Lys Ala Val Asp Thr Gly Xaa Val Pro His Gln Val 20 25 30														
	(2) INFORMATION FOR SEQ ID NO: 540:														
, 50	(i) SEQUENCE CHARACTERISTICS:(A) LENGTH: 106 amino acids(B) TYPE: amino acid														
55	(D) TOPOLOGY: linear (Xi) SEQUENCE DESCRIPTION: SEQ ID NO: 540:														
	Leu Ala Val Ser Thr Ser Phe Ile Cys Cys Ala Asp Ile Ser Thr Ala 1 5 10 15														
60	Leu Pro Leu Gly Ser Ser Arg Pro Ala Pro Ala Pro Arg His Arg Glu 20 25 30														

	His	Glu	His 35	Gly	His	Gln	Ala	Arg 40	Prò	Pro	Arg	Leu	Leu 45	Xaa	Thr	Ser
5	Leu	Met 50	Pro	Leu	Ser	The	Pro 55	Ala	Ala	Ala	Gln	Leu 60	Leu	Trp	Thr	Gln
10	65					70		Pro			75					80
	Leu	His	Thr	Gly	Pro 85	Arg	Ala	Leu	Pro	Pro 90	Gly	Pro		His	Pro 95	Ser
15	Leu	His	Val	Ala 100	Ala	Leu	Ser	Leu :	Leu 105	Arq						
20	(2)	INFO	ORMA	rion	FOR	SEQ	ID 1	VO: 5	541:							
25	,			· (.	A) L B) T D) T	engt: YPE : OPOL	H: 2 ami OGY:	ERISTON AND AND AND AND AND AND AND AND AND AN	mino cid ear	aci		. 54	1.			
	Glu 1							Trp	1	Arg				Ile	Leu 15	Glu
30	Met	Asn	Val	Gln 20	Ser	Val	Arg	Ser	Thr 25	Asp	Pro	Gln		Leu 30	Gly	Gly
35	Leu	Asp	Thr 35	Arg	Pro	His	Tyr	Ile 40	Thr	Arg	Arg	Tyr	Ala 45	Glu	Phe	Ser
	Ser	Ala 50	Leu	Val	Ser	Ile	Asn 55	Gln	Thr	Ile	Pro	Asn 60	Glu	Arg	Thr	Met
40	Gln 65	Leu	Leu	Gly	Gln	Leu 70	Gln	Val	Glu		Glu . 75	Asn	Phe	'Val	Leu	Arg 80
	Val	Ala	Aļa	Glu	Phe 85	Ser	Ser	Arg	Lys	Glu 90	Gln	Leu	Val	Phe	Leu 95	Ile
45	Asn	Asn	Tyr	Asp 100	Mec	Met	Leu	Gly	Val 105	Leu	Met	Glu	Arg	Ala 110	Ala	Asp
50	Asp	Ser	Lys 115	Glu	Val	Glu	Ser	Phė 120	Gln	Gln	Leu	Leu	Asn 125	Ala	Arg	Thr
	Gln	Glu 130	Phe	Ile	Glu	Glu	Leu 135	Leu	Ser	Pro	Pro	Phe 140	Gly	Gly	Leu	Val
55	Ala 145	Phe	Val	Lys	Glu	Ala 150	Glu	Ala	Leu	Ile	Glu 155	Arg	Gly	Gln	Ala	Glu 160
	Arg	Leu	Arg	Gly	Glu 165	Glu	Ala	Arg	Val	Thr 170	Gln	Leu	Ile	Arg	Gly 175	Phe

Gly Ser Ser Trp Lys Ser Ser Val Glu Ser Leu Ser Gln Asp Val Met

				130					185					190		
5	Arg	Ser	Phe 195	Thr	naA	Phe	Arg	Asn 200	Gly	Thr	Ser	Ile.	Ile 205	Gln	Gly	
	(2)	INFO	DRMAD	rion	FOR	SEQ	ID N	NO: 5	42:							
	-		(i) :	(.	A) L B) T	engt! Ype :	H: 1 ami	ERIST 10 au no ao line	mino cid		ds					
15			(xi)	•				PTION		EQ II	ON C	541	2 :			
	Ala 1	Leu	Leu	Lys	Tyr 5	Arg	Phe	Phe	Tyr	Gln 10	Phe	Leu	Leu	Gly	Asn 15	Glu
20	Arg	Ala	Thr	Ala 20	Lys	Glu	Ile	Arg	Asp 25	Glu	īyī	Val	Glu	Thr · 30	Ļeu	Ser
	Lys	Ile	Tyr 35	Leu	Ser	Tyr	Tyr	Arg 40	Ser	Tyr	Leu	Gly	Arg 45	Leu	Met	Lys · .
25	Val	Gln 50	Tyr	Glu	Glu	Val	Ala 55	Glu	Lys ;	Asp	Asp	Leu 60	Met	Gly	Val	Glu
30	Asp 65	Thr	Ala	Lys	Lys	Gly 70	Phe	Xaa	Şer		PT0 75	Ser	Leu	¥±a	Ser	Arg 80
	Asn	Thr	Ile	Phe	Thr 85	Leu	Gly	Thr	Arg	Gly 90	Ser	Val	Ile	Ser	Pro 95	Thr
35	Glu	Leu	Glu	Ala 100	Pro	Ile	Leu	Val	Pro 105	His	Thr	Ala	Gln	Arg 110		
40	(2)	INF	OFMA	TION	FOR	SEQ	ID 1	NO: S	543:							
			(i)	(A) L B) T	ENGT	H: 9 ami	ERIS' 7 am .no a	ino cid		s					
45			(xi)					lin PTIO		EQ I	D NO	: 54	3 :	·		
	Glu -1		Arg	Tyr	Pro 5	Phe	Glu	Ala	Leu	Phe 10	Arg	Ser	Gln	His	Tyr 15	Xaa
50	Leu	Leu	qzA :	Asn 20		Cys	Arg	Glu	Tyr 25	Leu	Phe	Ile	Cys	Glu 30	Phe	Phe
55	. Val	Val	Ser	_	Pro	Xaa	Ala	His 40	qzA	Leu	.Phe	His	Ala 45	Val	Met	Gly
	Arg	תלד 50		Ser	Met	Thr	Leu 55	Lys	His	Leu	Asp	Ser 60	Tyx	Leu	Ala	Asp
60	Cys 65		. Asp	Ala	Ile	Ala		Phe	Leu	Cys	Ile 75	His	Ile	Val	Leu	Arg 80

```
Phe Arg Asn Ile Ala Ala Lys Arg Asp Val Pro Ala Leu Asp Arg Tyr
                                 90
                      85
5
     Txp
10
      (2) INFORMATION FOR SEQ ID NO: 544:
            (i) SEQUENCE CHARACTERISTICS:
                   (A) LENGTH: 26 amino acids
                   (B) TYPE: amino acid
15
                   (D) TOPOLOGY: linear
             (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 544:
     Gly Gly Leu Asp Thr Arg Pro His Tyr Ile Thr Arg Arg Tyr Ala Glu
20
      Phe Ser Ser Ala Leu Val Ser Ile Asn Gln
                  20
     (2) INFORMATION FOR SEQ ID NO: 545:
             (i) SEQUENCE CHARACTERISTICS:
                    (A) LENGTH: 20 amino acids
30
                    (B) TYPE: amino acid
                    (D) TOPOLOGY: linear
             (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 545:
      Ser Arg Lys Glu Gln Leu Val Phe Leu Ile Asn Asn Tyr Asp Met Met
35
      Leu Gly Val Leu
40
      (2) INFORMATION FOR SEQ ID NO: 546:
             (i) SEQUENCE CHARACTERISTICS:
45
                    (A) LENGTH: 411 amino acids
                    (B) TYPE: amino acid
                    (D) TOPOLOGY: linear
             (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 546:
50
      Ala Leu Leu Lys Tyr Arg Phe Phe Tyr Gln Phe Leu Leu Gly Asn Glu
      Arg Ala Thr Ala Lys Glu Ile Arg Asp Glu Tyr Val Glu Thr Leu Ser
                   20
55
      Lys Ile Tyr Leu Ser Tyr Tyr Arg Ser Tyr Leu Gly Arg Leu Met Lys
                                 40
      Val Glm Tyr Glu Glu Val Ala Glu Lys Asp Asp Leu Met Gly Val Glu
60
```

	Asp 65	Thr	Ala	Lys	Lys	Gly 70	Phe	Xaa	Ser	Lys	?±: 73	Ser	Leu	Ærg	Ser	Arş El	
5	Asn	Thr	Ile	Phe	Thr 85	Leu	GŢĀ	Thr	Arg	90 90	Ser	7al	Ile	Ser	200 25	The	
10	Glu	Leu	Glu	Ala 100	Pro	Ile	Leu	Val	Pro 105	His	The	ai a	G <u>l</u>	A-g 110	Xae ,	glu	•
	Gln	Arg	Tyr 115	Pro	Phe	Glu	Ala	Leu 120	Phe	Arg	Ser	GĹn	His 125	Cyr	Xaa	Leu	
15	Leu	Asp 130	Asn	Ser	Cys	Arg	Glu 135	-	Leu	Phe	Ile	Cys 140	G1:1	Phe	Phe	'Val	
	Val 145	Ser	Gly	Pro	Xaa	Ala 150	His	Asp	Leu	Phe	His 153	Жa	V al	Met	Gly	253 163	
20	Thr	Leu	Ser	Met	Thr 165	Leu	Lys	His	Leu	Asp 170	Ser	gia	Leu	<u>lla</u>	Агр 175	Cys	
25	Tyr	ązp	Ala	Ile 180	Ala	Val	Phe	Leu	Cys 185	Ile	His	Ile	Val	190 190	-	Phe	
	Arg	Asn	Ile 195	Ala	Ala	Lys	Arg	Asp 200		, Sico	Als	leu	Asp 205	æg	Tyr	T ap	
30	Glu	Gln 210	Val	Leu	Ala	Leu	Leu 215	Trp	Pro	Arg	Phe	31u 220	Leu	Ile	Leu	31u	
	Мес 225	Asn	Val	Gln	Ser	Val 230	Arg	Ser	Thr	yeż	P ro 235	Glm	ATT.	Leu	Gly	91y 240	
35	Leu	qzA	Thr	Arg	Pro 245	His	Tyr	Ile	Thr	Arg 250	YZ.	€7.±	Ala	Blu	Fhe 235	Ser	
40	Ser	Ala	Leu	Val 260	Ser	Įle	Asn	Gln	Thr 265	Il∈	Ptto	Asn	Glu	2 7 9 270	7:	Met	
	Gln	Leu	~~~	Gly	Gln	Leu	Gln	Val 280	Glu	Val	Glu	Asn	Phe 285	Wal	Leu	Arş	
45	Val	Ala 290	Ala	Glu	Phe	Ser	Ser 295	Arg	Lys	Glu	Gl .	1 2 2 330	Va_	Phe	Leu	Ile	
	Asn 305	Asn	Tyr	Asp	Met	Met 310	Leu	Gly	Val	Leu	Met 315	Glu	Arģ	ala	Ala	320	
50	Asp	Ser	Lys	Glu	Val 325	Glu	Ser	Phe	Gln	Gln 330	Leu	Leu	Asta.	ala	AZG 335	Thr	
55	Gln	Glu		Ile 340	Glu	Glu	Leu	Leu	Ser 345	Pro	PES	Pie	G1ý	31y 350	iæi	Val	
	Ala	Phe	Val 355	Lys	Glu	Ala	Glu	Ala 360	Leu	Ile	Glu	_	365 365	Gln	Ala	Glu	
60	Arg	Leu 370	Arg	GJA	Glu	Glu	Ala 375	Arg	Val	Thr	G <u>l</u> =	Leu 320	Ile	Arg	Gly	Phe	

	385	261	Ser	TIĐ	ΓÃ2	390	361	VC.1	GIL	J=_	395	367	نندی	بيدي	VZI	400		
5	Yrg	Ser	Phe	Thr	Asn 405	Phe	Arg	Asn	Gly	Thr 410	Ser							
																•		
10	(2)	INFO	ORMAT	NOI	FOR	SEQ	ID N	10: 5	47:	,								
			(i) S					ERIST 03 ar			Ac							
15	•			(3) T	YPE:	ami	no ao line	cid									
			(xi)							EQ II	OM C	: 547	7:					
20	Tyr 1	Glu	Gly	Lys	Glu 5	Phe	Asp	Tyr	Val	Phe 10	Ser	Ile	Asp	Val	Asn 15	Glu		
7,5	Gly	Gly	Pro	Ser 20	Tyr	Lys	Leu	Pro	Tyr 25	Asn	Thr	Ser	Asp	Asp 30	Pro	L'ib,		٠
25	Leu	Thr	Ala 35	Tyr	Asn	Phe	Leu	Gln 40	Lys	Asn	Asp	Leu	Asn 45	Pro	Met	Phe		
,	Leu	Asp 50	Gln	Val	Ala	Lys	Phe 55	Ile.	İle	Asp	Asn	Th <u>r</u> 60	Lys	Gly	Gln	Met		
30	Leu 65	Gly	Leu	Gly	Asn	Pro 70	Ser	Phe	Ser	qzA	Pro `75	Phe	Thr	Gly	Gly	Gly 80		
35	Arg	Tyr	Val	Pro	Gly 85	Ser	Ser	Gly	Ser	Ser 90	Asn	Thr	Leu	Pro	Thr 95	Ala		
	Asp	Pro	Phe	Thr 100	Gly	Ala	Gly	Arg	Tyr 105	Val	Pro	Gly	Ser	Ala 11 <u>0</u>	Ser	Met		
40	Gly	Thr	Thr 115	Met	Ala	Gly	Val	Asp 120	Pro	Phe	Thr	Gly	Asn 125	Ser	Ala	Tyr		
	Arg	Ser 130	Ala	Ala	Ser	Lys	Thr 135	Met	Asn	Ile	Tyr	Phe 140	Pro	Lys	Ļys	Glu		
45	Ala 145		Thr	Phe	Asp	Gln 150		Asn	Pro	Thr	Gln 155	Ile	Leu	Gly	Lys	Leu 160		
50	Lys	Glu	Leu	Asn	Gly 165		Ala	Pro	Glu	Glu 170		Lys	Leu	Thr	Glu 175	Asp		٠ -
	Asp	Leu	Ile	Leu 180		Glu	Lys		Leu 185	Ser	Leu	Ile	Cys	Asn 190	Ser	Ser		
55	Ser	Glu	Lys 195		Thr	Val	Gln	Gln 200		Gln	Ile	Leu	Trp 205	Lys	Ala	Ile		
	Asn	Cys 210	Pro	Glu	Asp	Ile	Val 215		Pro	Ala	Leu	Asp 220	Ile	Leu	Arg	Leu		.e [.]
60	Ser	114	ive	u; e	D-0	Ser	Val	Asn	Glu	Asn	. Phe	Cvs	Asn	Glu	Lvs	Glu		

	225					230					235					240	
5	G1'n	Ala	Gln	Phe	Ser 245	Ser	His	Leu	Ile	Asn 250	Leu	Leu	Asn	Pro	Lys 255	GŢĀ	
	Lys	Pro	Ala	Asn 250	Gln	Leu	Leu	Ala	Leu 265	Arg	Thr	Phe	Cys	Asn 270	Cys	Phe	
10	Val	GŢĀ	Gln 275	Ala	Gly	Gln	Lys	Leu 280	Mec	Met	Ser	Gln	Arg 285	Glu	Ser	Leu	
	Mec	Ser 290	Hís	Ala	Ile	Glu	Leu 295	Lys	Ser	GĮĄ	Ser	Asn 300	Lys	Asn	Ile		
15								: ,							-		
	(2)	INF	ORMA:	LION	FOR	SEQ	ID I	йо: з	548:				•		٠		
20			(i)					ERIS. 8 am			s .						
								no a lin									
	-		(xi)					PTIO		EQ II	ONO	: 54	8 :				
25		Ile	Ala	Leu	Ala 5	Thr	Leu	Ala	Leu	Asn 10	Tyr	Ser	Val	Cys		His	
	1				5				:	10				-	15		
	Lys	Asp					٠.										
30										•							
	(2)	INF	DEMAC	מסדי	FOR	SEO	ז מד	NO: 5	549:								
35								ERIS		_							
			(±)	ί.	A) L	ENGT	H: 4	9 am	ino		s						
				(D) T	OPOL	OGY:	no a	ear								
40			(xi)	SEQ	JENC:	E DE.	SCRI	PTIO	N: 5	EQ II	ON C	: 54:	9 :				
	His 1	Asn	Ile [.]	Glu	Gly 5	Lys	Ala	Gln		Leu' 10	Ser	Leu	Ile	Ser	Thr 15	.Ile	
15	Leu	Glu	Val	Val .20	Gln	Asp	Ļeu	Glu	Ala 25	Thr.	Phę	Arg	Leu	Leu 30	Val	Ala	
	Leu	Gly	Thr 35	Leu	Ile	Ser	Asp	Asp 40	Ser	Asn	Ala	Val	Gln 45	Leu	Ala	Lys	
50	Ser	•							•								
									,							٠	
55	(2)	INF	ORMA	rion	FOR	SEQ	ID I	NO: 5	50:								

(i) SEQUENCE CHARACTERISTICS:

(D) TOPOLOGY: linear

60

(A) LENGTH: 30 amino acids(B) TYPE: amino acid

•			رخدا	20	·				• • • • • • • • • • • • • • • • • • • •				• •			
5	Leu 1	GĵÀ	Val	ązĄ	Ser 5	Gln	Ile	Lys	Lys	Tyr 10	Ser	Ser	Val	Ser	Glu. 15	
,	Ala	Lys	Val	Ser 20	Glu	Cys	Cys	YIG	Phe 25	Ile	Leu	Asn	Leu	Leu 30		
10	(2)	INFO	ORMAI	rion	FOR	SEQ	ID N	iO: 5	51:					-		
15		•		(3	A) Li E) T D) T	ENGT: YPE: OPOL	H: 4 ami: DGY:	no a lin	mino cid ear	aci		: 55:	1:			
20	Tyr 1	Glu	Gly	Lys	Glu 5	Phe	Asp	Tyr	Val	Phe 10	Ser	Ile	Asp	Val	Asn 15	Glu
	Gly	Gly	Pro	Ser 20	īyr	Lys	Leu -	Pro	Tyr 25	Asn	Thr	Ser	Asp	qaA 30	Pro	Ţŗģ
25	Leu	Thr-	Ala 35	Tyr	Asn	Phe	Leu	Gln 40		Asn	Asp	Leu	Asn 45	Pro	Met	Phe
30	Leu	Asp 50	Gln	Val	Ala	Lys	Phe 55	Ile	Ile	`Asp	Asn	Thr 60	Lys	Gly	Gln	Met
	Leu 65	Gly	Leu	Gly	Asn	Pro 70	Ser	Phe	Ser	Asp	Pro 75	Phe	Thr	·Gly	Gly	Gly 80
35	Arg	Tyr	Val	PTO	Gly 85	Ser	Ser	Gly	Ser	Ser 90	Asn	Thr	Leu	Pro	Thr 95	Ala
	Asp	Pro	Phe	Thr 100	Gly	Ala	GŢĀ	Arg	Tyr 105	Val	Pro	Gly	Ser	Ala 110	Ser	Met
40	Gly	Thr	Thr 115	Met	Ala	Gly	Val	Asp 120	Pro	Phe	Thr	GJÄ	Asn 125		Ala	Tyr
45	Arg	Ser 130		Ala	Ser	Lys	Thr 135	Met	Asn	Ile	Tyr	Phe 140	Pro	Lys	Lys	Glu
	Ala 145		Thr	Phe	Asp	Gln 150		Asn	Pro	Thr	Gln 155	Ile	Leu	. Gly	Lys	Leu 150
50	Lys	Glu	Leu	. Asn	Gly 165		Ala	Pro	Glu	Glu 170		Lys	Leu	Thr	Glu 175	Asp
	Asp	Leu	Ile	: Leu 180		Glu	Lys	Ile	Leu 185	Ser	Leu	Ile	Cys	190	Ser	Ser
55	Ser	Glu	Lys 195	Pro	Thr	Val	Gln	Gln 200		Gln	. Ile	Leu	Trp 205		Ala	Ile
60	Asn	Cys 210		Glu	Asp	Ile	Val 215		Pro	Ala	. Leu	Asp 220		: Leu	Arg	Leu

	Ser 225	Ile	Lys	His	Pro	Ser 230	Val	Asn	Glu	Asn	Phe 235	ĊĀR	Asn	Glu	Lys	Glu 240
5	Gly	Ala	Gln	Phe	Ser 245	Ser	His	Leu	Ile	Asn 250	Leu	Leu	Asn	Pro	Lys 255	Gly
	Lys	Pro	Ala	Asn 260	Gln	Leu ,	Leu	Ala	Leu 265	A_g	Thr	Phe	Cys	Asn 270	Cys	Phe
10	·Val	Gly	Gln 275	'Ala	ejā	Gln	Lys	Leu 280	Met	Mes	Ser	Gln	Arg 285	Glu	Ser	Leu
15	Met	Ser 290	His	Ala	Ile	Glu	Leu 295	Lys	Ser	Gly	Ser	Asn 300	Lys	Asn	Ile	His
13	Ile 305	Ala	Leu 	Ala	Thr	Leu 310	Ala	: Leu	Asn	Tyr	Ser 315	Val	Cys	Phe	His	Lys 320
20	Asp	His	Asn	Ile	Glu 325	Gly	Lys	Ala	Gln	Cys 330	Leu	Ser	Leu	Ile	Ser 335	Thr
	Ile	Leu	Glu	Val 340	Val	Gln	Asp	Leu	Glu 345	Ala	Thr	Phe	Arg	Leu 350	Leu	Val
25	Ala	Leu	Gly 355	Thr	Leu	Ile	Ser	Asp 360	Asp :	Ser	Asn	Ala	Val 365	Gln	Leu	Ala
30	Lys	Ser 370	Leu'	Gly	Val	Asp	Ser 375	Gln	Ile	Lys	Lys	Tyr 380	Ser	Ser	Val	Ser
	Glu 385	Pro	Ala	Lys	Val	Ser 390	Glu	Суз	Cys	Arg	Phe 395	Ile	Leu	Asn	Leu	Leu 400
35	•															
40	(2)	ĮNF(ORMA:	MOIT	FOR	SEQ	ID 1	NO: 5	552:							
			(i) .	(A) Ĺ	ENGT	H: 1		mino	aci	ds		•			
45			(xi)					lin PTIO		EQ II	ON C	: 55	2:		-	
	Tyr 1	Pro	Asn	Gln	Asp 5	Gly	Asp	Ile	Leu	Arg 10	qzA	Gln	Val	Leu	His 15	Glu
50	His	Ile	GÌn	Arg 20	Leu	Ser	Lys	Val	Val 25	Thr	Ala	Asn	His	Arg 30	Ala	Leu
, 55	Gln	Ile	Pro 35	Glu	Val	TYT	Leu	Arg 40	Glu	Ala	Pro	Trp	Pro 45	Ser	Ala	Gln
5 5	Ser	Glu 50	Ile	Arg	Thr	Ile	Ser 55	Ala	Tyr	Lys	Thr	Pro 60	Arg	Asp	Lys	Val
																•

Gln Cys Ile Leu Arg Met Cys Ser Thr Ile Met Asn Leu Leu Ser Leu 65 70 75 80

	Ala	Asn	Glu	Asp	Ser 85	Val	Pro	Gly	Ala	qzA 90	Asp	Phe	Val	Pro	Val 95	Leu	
5	Val	Phe	Val	Leu 100	Ile	Lys	Ala	Asn	Pro 105	Pro	Cys	Leu	Leu	Ser 110	Thr	Val	
10	Gln	Tyr	Ile 115	Ser	Ser	Phe	Tyr	Ala 120	Ser	Cys	Leu	Ser	Gly 125	Glu	Glu	Ser	
	TYT	Trp 130	•	Met	Gln	Phe	Thr 135	Ala	Ala	Val	Glu						
15	(2)	INFO	OPMA:	NOIT	FOR	SEQ	ID N	NO: 5	553 :								
20			,	. (:	A) L B) T D) T	engt: YPE : OPOL	H: 1 ami OGY:	ERIS: 44 au no a lin PTIO	mino cid ear	aci		: 55:	3:				
25	Tyr 1	Pro	Asn	Gln	Asp 5	Gly	Asp	Ile	Leu	Arg 10	Asp	Gln	Val	Leu	His 15	Glu	
	His	Ile	Gln	Arg 20	Leu	Ser	Lys	Val	Val 25	Thr	Ala	Asn	His	Arg .30	Ala	Leu	
30	Gln	Ile	Pro 35	Glu	Val	Tyr	Leu	Arg 40	Glu	Ala	Pro	Trp	Pro 45	Ser	Ala	Gln	
35	Ser	Glu 50	Ile	_	Thr		Ser .55	Ala	Tyr		Thr	Pro 60	-	Asp	Lys	Val	
	Gln 65	Cys	Ile		Arg		Cys	Ser	Thr	Ile	Met 75	Asn	Leu	Leu	Ser	Leu 80	
40	Ala	Asn	Glu	Asp	Ser 85	Val	Pro	Gly	Ala	gzA 0e	Asp	Phe	Val	Pro	Val 95	Leu	
	Val	Phe	Val	Leu 100	Ile	Lys	Ala	Asn	Pro 105	Pro	Cvs	Leu	Leu	Ser 110		Val	
45	Glm	Tyr	Ile 115	Ser	Ser	Phe	Tyr	Ala 120	Ser	Cys	Leu	Ser	Gly 125	Glu	Glu	Ser	
50	Tyr	Trp 130	Trp	Mec	Gln	Phe	Thr 135	Ala	Ala	Val	Glu	Phe 140	Ile	Lys	Thr	Ile	

(2) INFORMATION FOR SEQ ID NO: 554:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 14 amino acids

60 (B) TYPE: amino acid

```
(D) TOPOLOGY: linear
           (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 554:
     Tyr Pro Asn Gln Asp Gly Asp Ile Leu Arg Asp Gln Val Leu
     (2) INFORMATION FOR SEQ ID NO: 555:
10
           (i) SEQUENCE CHARACTERISTICS:
                (A) LENGTH: 11 amino acids
                 (B) TYPE: amino acid
                 (D) TOPOLOGY: linear
15
           (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 555:
     Glu Ala Pro Trp Pro Ser Ala Gln Ser Glu Ile
      1 . 5
20
     (2) INFORMATION FOR SEQ ID NO: 556:
           (i) SEQUENCE CHARACTERISTICS:
25
            (A) LENGTH: 21 amino acids
                (B) TYPE: amino acid
                 (D) TOPOLOGY: linear
          (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 556:
30
     Ser Gly Glu Glu Ser Tyr Trp Trp Met Gln Phe Thr Ala Ala Val Glu
                          10
      1 5
     Phe Ile Lys Thr Ile
               20
35
    (2) INFORMATION FOR SEO ID NO: 557:
40
           (i) SEQUENCE CHARACTERISTICS:
              . (A) LENGTH: 18 amino acids
                 (B) TYPE: amino acid
            (D) TOPOLOGY: linear
           (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 557:
45
     Ala Asp Asp Phe Val Pro Val Leu Val Phe Val Leu Ile Lys Ala Asn
                        10 , 15
      1 5
     Pro Pro
50
     (2) INFORMATION FOR SEQ ID NO: 558:
55
           (i) SEQUENCE CHARACTERISTICS:
                (A) LENGTH: 12 amino acids
                 (B) TYPE: amino acid
                (D) TOPOLOGY: linear
60
           (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 558:
```

```
Tyr Lys Thr Pro Arg Asp Lys Val Gln Cys Ile Leu
  5
       (2) INFORMATION FOR SEQ ID NO: 559:
              (i) SEQUENCE CHARACTERISTICS:
10
                     (A) LENGTH: 15 amino acids
                    (B) TYPE: amino acid
                    (D) TOPOLOGY: linear
              (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 559:
15
      Gly Ala Asp Asp Phe Val Pro Val Leu Val Phe Val Leu Ile Lys
                        5
                                           10
20
      (2) INFORMATION FOR SEQ ID NO: 560:
              (i) SEQUENCE CHARACTERISTICS:
                    (A) LENGTH: 12 amino acids
                    (B) TYPE: amino acid
25
                    (D) TOPOLOGY: linear
             (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 560:
      Pro Val Leu Val Phe Val Leu Ile Lys Ala Asn Pro
                       5
30
      (2) INFORMATION FOR SEQ ID NO: 561:
35
             (i) SEQUENCE CHARACTERISTICS:
                   (A) LENGTH: 17 amino acids
                    (B) TYPE: amino acid
                    (D) TOPOLOGY: linear
             (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 561:
40
      Ser Ala Arg Ala Ser Thr Gln Pro Pro Ala Gly Gln His Pro Gly Pro
                                         10
                                                              15
      Cys
45
      (2) INFORMATION FOR SEQ ID NO: 562:
50
             (i) SEQUENCE CHAPACTERISTICS:
                    (A) LENGTH: 33 amino acids
                    (B) TYPE: amino acid
                    (D) TOPOLOGY: linear
55
             (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 562:
     Met Pro Gly Arg Trp Arg Trp Gln Arg Asp Met His Pro Ala Arg Lys
                        5
                                           10
60
     Leu Leu Ser Leu Leu Phe Leu Ile Leu Met Gly Thr Glu Leu Thr Gln
```

30 20 25 qzĄ 5 (2) INFORMATION FOR SEQ ID NO: 563: (i) SEQUENCE CHARACTERISTICS: 10 (A) LENGTH: 19 amino acids (E) TYPE: amino acid (D) TOPOLOGY: linear (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 563: 15 Ser Ala Ala Pro Asp Ser Leu Leu Arg Ser Ser Lys Gly Ser Thr Arg 5 Gly Ser Leu 20 (2) INFORMATION FOR SEQ ID NO: 564: 25 (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 20 amino acids (B) TYPE: amino acid (D) TOPOLOGY: linear (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 564: 30 Ala Ala Ile Val Ile Trp Arg Gly Lys Ser Glu Ser Arg Ile Ala Lys 5 35 Thr Pro Gly Ile . 20 (2) INFORMATION FOR SEQ ID NO: 565: 40 (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 17 amino acids (B) TYPE: amino acid 45 (D) TOPOLOGY: linear (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 565: Pro Leu Gly Ile Thr Leu Pro Leu Gly Ala Pro Glu Thr Gly Gly Gly . 15 10 5 50 asa 55 (2) INFORMATION FOR SEQ ID NO: 566: (i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 20 amino acids(B) TYPE: amino acid

650 ·

```
(D) TOPOLOGY: linear
            (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 566:
    Cys Ala Ala Glu Thr Trp Lys Gly Ser Gln Arg Ala Gly Gln Leu Cys
                                        10
    Ala Leu Leu Ala
10
     (2) INFORMATION FOR SEQ ID NO: 567:
            (i) SEQUENCE CHARACTERISTICS:
15
                  (A) LENGTH: 20 amino acids
                   (B) TYPE: amino acid
                   (D) TOPOLOGY: linear ·
         (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 567:
20
     Phe Arg Gly Gly Thr Leu Val Leu Pro Pro Thr His Thr Pro Glu
                              10
                     5
     Trp Leu Ile Leu
25
     (2) INFORMATION FOR SEQ ID NO: 568:
30
            (i) SEQUENCE CHAPACTERISTICS:
                   (A) LENGTH: 22 amino acids
                   (B) TYPE: amino acid
                   (D) TOPOLOGY: linear
             (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 568:
35
     Met Arg Ser Ala Arg Pro Ser Leu Gly Cys Leu Pro Ser Trp Ala Phe
                                       10
      Ser Gln Ala Leu Asn Ile
40
                  20
      (2) INFORMATION FOR SEQ ID NO: 569:
45
             (i) SEQUENCE CHARACTERISTICS:
                    (A) LENGTH: 22 amino acids
                    (B) TYPE: amino acid
                    (D) TOPOLOGY: linear
50
            (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 569:
      Leu Leu Gly Leu Lys Gly Leu Ala Pro Ala Glu Ile Ser Ala Val Cys
            5
      Glu Lys Gly Asn Phe Asn
                  20
```

(2) INFORMATION FOR SEQ ID NO: 570:

```
(i) SEQUENCE CHARACTERISTICS:
                    (A) LENGTH: 26 amino acids
                    (B) TYPE: amino acid
 5
                    (D) TOPOLOGY: linear
             (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 570:
     Val Ala His Gly Leu Ala Trp Ser Tyr Tyr Ile Gly Tyr Leu Arg Leu
                    ٠5 .
10
     Ile Leu Pro Glu Leu Gln Ala Arg Ile Arg
                  20
15
     (2) INFORMATION FOR SEQ ID NO: 571:
            (i) SEQUENCE CHARACTERISTICS:
                   (A) LENGTH: 18 amino acids
20 ~
                    (B) TYPE: amino acid
                    (D) TOPOLOGY: linear
             (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 571:
     Thr Tyr Asn Gln His Tyr Asn Asn Leu Leu Arg Gly Ala Val Ser Gln
25
      1 , 5
                                         10
     Arg Cys
30
      (2) INFORMATION FOR SEQ ID NO: 572:
             (i) SEQUENCE CHARACTERISTICS:
35
                   (A) LENGTH: 43 amino acids
                    (B) TYPE: amino acid
                   (D) TOPOLOGY: linear
             (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 572:
40
      Ile Leu Leu Pro Leu Asp Cys Gly Val Pro Asp Asn Leu Ser Met Ala
       1
                      3
                                         10
      Asp Pro Asn Ile Arg Phe Leu Asp Lys Leu Pro Gln Gln Thr Gly Asp
                                     25
                 20
45
      Arg Ala Gly Ile Lys Asp Arg Val Tyr Ser Asn
              35
                                  40
50
      (2) INFORMATION FOR SEQ ID NO: 573:
             (i) SEQUENCE CHARACTERISTICS:
                   (A) LENGTH: 45 amino acids
55
                    (B) TYPE: amino acid
                   (D) TOPOLOGY: linear
             (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 573:
      Ser Ile Tyr Glu Leu Leu Glu Asn Gly Gln Arg Ala Gly Thr Cys Val
60
                                         10
```

	Leu Glu Tyr Ala Thr Pro Leu Gln Thr Leu Phe Ala Met Ser Gln Tyr 20 . 25 30
5	Ser Gln Ala Gly Phe Ser Gly Glu Asp Arg Leu Glu Gln 35 40 45
10 .	(2) INFORMATION FOR SEQ ID NO: 574:
	(i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 92 amino acids (B) TYPE: amino acid
15	(D) TOPOLOGY. linear (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 574:
20	Ala Lys Leu Phe Cys Arg Thr Leu Glu Asp Ile Leu Ala Asp Ala Pro 1 5 10 15
	Glu Ser Gln Asn Asn Cys Arg Leu Ile Ala Tyr Gln Glu Pro Ala Asp 20 25 30
25	Asp Ser Ser Phe Ser Leu Ser Gln Glu Val Leu Arg His Leu Arg Gln 35 40 45
30 ·	Glu Glu Lys Glu Glu Val Thr Val Gly Ser Leu Lys Thr Ser Ala Val 50 55 60
30	Pro Ser Thr Ser Thr Met Ser Gln Glu Pro Glu Leu Leu Ile Ser Gly 65 70 75 80 Met Glu Lys Pro Leu Pro Leu Arg Thr Asp Phe Ser
35	85 90
	(2) INFORMATION FOR SEQ ID NO: 575:
40	(i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 43 amino acids (B) TYPE: amino acid (D) TOPOLOGY: linear
45	(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 575: Leu Leu Gly Leu Lys Gly Leu Ala Pro Ala Glu Ile Ser Ala Val Cys
	1 5 10 15 Glu Lys Gly Asn Phe Asn Val Ala His Gly Leu Ala Trp Ser Tyr Tyr
50	20 25 30 Ille Gly Tyr Leu Arg Leu Ile Leu Pro Glu Leu
55	35 40
	(2) INFORMATION FOR SEQ ID NO: 576:
	(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 22 amino acids

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(B) TYPE: amino acid -
                     (D) TCPOLCGY: linear
               (:d) SEQUENCE DESCRIPTION: SEQ ID NO: 576:
      Thr Mat Lys Leu Leu Lys Leu Arg Arg Ash Ile Val Lys Leu Ser Leu
                                           10
                        5
                                                                15

    Tyr Arg His Phe Thr Asn

                    20
_ 10
        (2) DECEMPTION FOR SEQ ID NO: 577:
            (i) SEQUENCE CHARACTERISTICS:
  15
                     (A) LEXTH: 22 amino acids
                      (3) TIPE: amino acid
                     (D) TOPOLOGY: linear
              (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 577:
  20
        Thr leu Ile Leu Ala Val Ala Ala Ser Ile Val Phe Ile Ile Trp Thr
        Thr Met Lys Phe Arg Ile
  25
       (2) DEFORMATION FOR SEQ ID NO: 578:
  30
             (i) SEQUENCE CHARACTERISTICS:
                     (A) LENGTH: 28 amino acids
                      E) TYPE: amino acid
                      D, TOPOLOGY: linear
               (mi) SEQUENCE DESCRIPTION: SEQ ID NO: 578:
  35
        Val Thr Cys Gim Ser Asp Trp Arg Glu Leu Trp Val Asp Asp Ala Ile
                                            10
  <del>1</del>0
        Trp Arg Leu Leu Phe Ser Met, Ile Leu Phe Val Ile
                 1. 20
 (45 (2) DIFGENGATION FOR SEQ ID NO: 579:
               (i) SEQUENCE CHARACTERISTICS:
                     (A) LENGTH: 27 amino acids
                      (3) TYPE: amino acid
  50
                     (D) TOPOLOGY: linear
               (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 579:
        Met Val Leu Top Arg Pro Ser Ala Asn Asn Gln Arg Phe Ala Phe Ser
                        5
  55
        Pro Leu Ser Glu Glu Glu Glu Glu Asp Glu Gln
                    20
```

```
(2) INFORMATION FOR SEQ ID NO: 580:
            (i) SEQUENCE CHARACTERISTICS:
                  (A) LENGTH: 27 amino acids
 5
                  (B) TYPE: amino acid
                  (D) TOPOLOGY: linear
            (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 530:
     Met Val Leu Trp Arg Pro Ser Ala Asn Asn Gln Arg Phe Ala Phe Ser
10
     Pro Leu Ser Glu Glu Glu Glu Glu Asp Glu Gln ·
        . 20
15
     (2) INFORMATION FOR SEQ ID NO: 581:
            (i) SEQUENCE CHARACTERISTICS:
20
             (A) LENGTH: 35 amino acids
                 (3) TYPE: amino acid
                  (D) TOPOLOGY: linear
        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 581:
25
     Lys Glu Pro Met Leu Lys Glu Ser Phe Glu Gly Met Lys Met Arg Ser
      1 5 10
     Thr Lys Gln Glu Pro Asn Gly Asn Ser Lys Val Asn Lys Ala Gln Glu
                         25
30
     Asp Asp Leu
            35
35
     (2) INFORMATION FOR SEQ ID NO: 582: .
            (i) SEQUENCE CHARACTERISTICS:
                  (A) LENGTH: 37 amino acids
40
                  (B) TYPE: amino acid
                  (D) TOPOLOGY: linear
            (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 582:
     Lys Trp Val Glu Glu Asn Val Pro Ser Ser Val Thr Asp Val Ala Leu
45
     Pro Ala Leu Leu Asp Ser Asp Glu Glu Arg Met Ile Thr His Phe Glu
                               25
50
     Arg Ser Lys Met Glu
             35
55
     (2) INFORMATION FOR SEQ ID NO: 583:
            (i) SEQUENCE CHARACTERISTICS:
                 (A) LENGTH: 20 amino acids
               ....(B) TYPE:_amino acid
60
                 (D) TOPOLOGY: linear
```

```
(xi) sequence description: seq in no: 888:
     Asp Pro Arg Val Arg Leu Asm Ser Leu Thr Cys Lys His lie Phe lie
5
     Ser Leu Thr Gla
10
     (2). INFORMATION FOR SEQ ID NO: 584:
            (i) sequence consucrementations:
                   (A) INVERSE LI Emino estita
15
                   (B) TIFE: amirio 2015
                   (D) TOPOLOFY: linear
            (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 8:4:
     Tyr Glu Pro Met Asp Phe Maa Met Ala Leu Ile Tyr Asp
20
            5 .
     (2) INFORMATION FOR SEQ → MO: 335:
25
          (i) SEQUENCE CERSACTERISTIES:
                   (A) LENTH: 15 amino acids
                    (B) TiFE: Emino acid
                   (D) TOPILDEY: linear
           (xi) sequence description: seq I NO: 516:
30
      The Arg His Glu Let Thr Wal Let Arg Asp Thr Arg Pro Ala Dys Ala
35
40
    (2) INFORMATION FOR SEQ ID NO: 586:
             (i) SEQUENCE CHAPACTERISTICS:
                    (A) LENGTH: 10 animo actida
                    (B) TYPE: smino soid
45
                   (D) CCPOLOGY: linear
            (xi) SEQUENCE DESCRIPTION: SEQ II NO: 886:
      Met Asp Phe Yaa Ket Ala leu Ile Dit Asp
     . 1 5
50
      (2) INFORMATION FOR SEQ ID NO: EST:
55
             (i) SEQUENCE CHAPACTERISTICS:
                   (A) IDIGIH: 14 amino actis
                    (B) TAPE: smino spid
                   (D) TOPOLOGY: linear
             (xi) SEQUENCE DESCRIPTION: SEQ ID NO: EET:
60
```

	Met Gln Glu Met Met Arg Asn Gln Asp Arg Ala Leu Ser Asn Leu Glu 1 5 10 15
5	Ser Ile Pro Gly Gly Tyr Asn Ala 20
	•
10	(2) INFORMATION FOR SEQ ID NO: 588:
•	(i) SEQUENCE CHARACTERISTICS:(A) LENGTH: 25 amino acids(B) TYPE: amino acid(D) TOPOLOGY: linear
15	(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 500:
	Leu Arg Arg Met Tyr Thr Asp Ile Gln Glu Pro Met Leu Ser Ala Ala 1 5 10 15
20	Gln Glu Gln Phe Gly Gly Asn Pro Phe 20 25
25	(2) INFORMATION FOR SEQ ID NO: 589:
	(i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 32 amino acids
30	(B) TYPE: amino acid (D) TOPOLOGY: linear (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 589:
35	Ala Ser Leu Val Ser Asn Thr Ser Ser Gly Glu Gly Ser Gln Pro Ser 1 5 10 15
	Arg Thr Glu Asn Arg Asp Pro Leu Pro Asn Pro Trp Ala Pro Gln Thr 20 25 30
40	
45	(2) INFORMATION FOR SEQ ID NO: 590:
	(i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 71 amino acids (B) TYPE: amino acid
50	(XI) TOPOLOGY: linear (XI) SEQUENCE DESCRIPTION: SEQ ID NO: 590:
	Ser Gln Ser Ser Ser Ala Ser Ser Gly Thr Ala Ser Thr Val Gly Gly 1
55	Thr Thr Gly Ser Thr Ala Ser Gly Thr Ser Gly Gln Ser Thr Thr Ala 20 25 30
60	Pro Asn Leu Val Pro Gly Val Gly Ala Ser Met Phe Asn Thr Pro Gly 35 40 45

```
Met Gln Ser Leu Leu Gln Gln Ile Thr Glu Asn Pro Gln Leu Met Gln
        50
     Asn Met Leu Ser Ala Pro Tyr
     (2) INFORMATION FOR SEQ ID NO: 591:
10
           (i) SEQUENCE CHARACTERISTICS:
                 (A) LENGTH: 45 amino acids
                  (B) TYPE: amino acid
                 (D) TOPOLOGY: linear
15
           (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 591:
     Met Arg Ser Met Met Gln Ser Leu Ser Gln Asn Pro Asp Leu Ala Ala
      1 5
                                   . 10
20
     Gln Met Met Leu Asn Asn Pro Leu Phe Ala Gly Asn Pro Gln Leu Gln
       20 25 30
     Glu Gln Met Arg Gln Gln Leu Pro Thr Phe Leu Gln Gln
           35 40 45
25
     (2) INFORMATION FOR SEQ ID NO: 592:
30
           (i) SEQUENCE CHARACTERISTICS:
                 (A) LENGTH: 73 amino acids
                 (B) TYPE: amino acid
                 (D) TOPOLOGY: linear
           (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 592:
35
     Met Gln Asn Pro Asp Thr Leu Ser Ala Met Ser Asn Pro Arg Ala Met
                                    10
     Gln Ala Leu Leu Gln Ile Gln Gln Gly Leu Gln Thr Leu Ala Thr Glu
40
     Ala Pro Gly Leu Ile Pro Gly Phe Thr Pro Gly Leu Gly Ala Leu Gly
45
     Ser Thr Gly Gly Ser Ser Gly Thr Asn Gly Ser Asn Ala Thr Pro Ser
             55 60
     Glu Asn Thr Ser Pro Thr Ala Gly Thr
50
     (2) INFORMATION FOR SEQ ID NO: 593:
55
           (i) SEQUENCE CHARACTERISTICS:
                (A) LENGTH: 72 amino acids
                 (B) TYPE: amino acid
                 (D) TOPOLOGY: linear
          (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 593:
60
```

```
The Flu Pro Gly His Gln Gln Phe Ile Gln Gln Met Leu Gln Ala Leu
                                     10
     Ala Bly Val Asn Pro Glm Leu Glm Asn Pro Glu Val Arg Phe Glm Glm
5
                      . 25
                20
     Fir Let Git Gin Leu Ser Ala Met Gly Phe Leu Ash Arg Glu Ala Ash
                            40
    Let Ilm Ala Leu Ile Ala Thr Gly Gly Asp Ile Asn Ala Ala Ile Glu
     Arg Let Let Gly Ser Gln Pro Ser
                      70
15
     (2) DESCRIPTION FOR SEQ ID NO: 594:
20
        (i) SEQUENCE CHARACTERISTICS:
                 (A) LENGTH: 45 amino acids
                  (3) TYPE: amino acid
                 (D) TOPOLOGY: linear
            (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 594:
25
     Arg Ash Pro Ala Met Met Gln Glu Met Met Arg Ash Gln Asp Arg Ala
     Leu Ser Ash Leu Glu Ser Ile Pro Gly Gly Tyr Ash Ala Leu Arg Arg
30
        20
                                   25
     Met Tyr Thr Asp Ile Gln Glu Pro Met Leu Ser Ala Ala
            35
                               40
35
     (2) DEFORMATION FOR SEQ ID NO: 595:
            (i) SEQUENCE CHARACTERISTICS:
40
                 (A) LENGTH: 13 amino acids
                  (E) TYPE: amino acid
                  (D) TOPOLOGY: linear
            (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 595:
     Gly Asn Pro Phe Ala Ser Leu Val Ser Asn Thr Ser Ser
       1 5 10
50
     (2) DIFORMATION FOR SEQ ID NO: 596:
            (i) SEQUENCE CHARACTERISTICS:
                 (A) LENGTH: 11 amino acids.
                  (E) TYPE: amino acid
55
                  (D) TOPOLOGY: linear
           (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 596:
     Glu Asn Arg Asp Pro Leu Pro Asn Pro Trp Ala
              5
```

```
(2) INFORMATION FOR SEQ ID NO: 597:
 5
            (i) SEQUENCE CHARACTERISTICS:
                  (A) LENGTH: 17 amino acids
                   (E) TYPE: amino acid
                   (D) TOPOLOGY: linear
            (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 597:
10
     Gly Lys Ile Leu Lys Asp Gln Asp Thr Leu Ser Gln His Gly Ile His
                 . 5
                                       10
     Asp
15
     (2) INFORMATION FOR SEQ ID NO: 598:
20
            (i) SEQUENCE CHARACTERISTICS:
                   (A) LENGTH: 14 amino acids
                   (B) TYPE: amino acid
                  (D) TOPOLOGY: linear
25
            (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 598:
     Gly Leu Thr Val His Leu Val Ile Eys Thr Gln Asn Arg Pro
                      5
30
     (2) INFORMATION FOR SEQ ID NO: 599:
            (i) SEQUENCE CHARACTERISTICS:
35
                   (A) LENGTH: 18 amino acids
                   (B) TYPE: amino acid
                   (D) TOPOLOGY: linear
            (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 599:
     Ser Glu Leu Gln Ser Gln Met Gln Arg Gln Leu Leu Ser Asn Pro Glu
     1 5
                           . 10
     Met Met
45
     (2) INFORMATION FOR SEQ ID NO: 600:
50
            (i) SEQUENCE CHARACTERISTICS:
                   (A) LENGTH: 14 amino acids
                   (B) TYPE: amino acid
                   (D) TOPOLOGY: linear
            (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 600:
55
     Pro Glu Ile Ser His Met Leu Asn Asn Pro Asp Ile Met Arg
       1 , 5
```

```
(2) INFORMATION FOR SEQ ID NO: 601:
          (i) SEQUENCE CHARACTERISTICS:
                (A) LENGTH: 13 amino acids
5
                 (E) TYPE: amino acid
                (D) TOPOLOGY: linear
          (xi) SEQUENCE DESCRIPTION: SEQ ID No: 601:
    Arg Gln Leu Ile Met Ala Asn Pro Gln Met Gln Gln Leu Ile Gln Arg
10
    15
. Asn Pro
15
 . (2) INFORMATION FOR SEQ ID NO: 502:
           (i) SEQUENCE CHAPACTERISTICS:
20
               (A) LEMGTH: 27 amino acids
                (3) TYPE: amino acid
                (D) TOPOLOGY: linear
           (xi) SEQUENCE DESCRIPTION: SEQ ID NO; 602:
25
    Asn Leu Cys His Val Asp Cys Gln Asp Leu Leu Asn Pro Asn Leu Leu
     1 5 , 15 15
    Ala Gly Ile His Cys Ala Lys Arg Ile Val Ser
                             25
30
 (2) INFORMATION FOR SEQ ID NO: 603:
35 (i) SEQUENCE CHAPACTERISTICS:
                (A) LENGTH: 23 amino acids
                (B) TYPE: amino acid
                (D) TOPOLOGY: linear
           (xi) SEQUENCE DESCRIPTION: SEQ □ MO: 503:
40
     Leu Asp Gly Phe Glu Gly Tyr Ser Leu Ser Asp Trp Leu Cys Leu Ala
                          10 15
     1 . 5
     Phe Val Glu Ser Lys Phe Asn
45
         20
    (2) INFORMATION FOR SEC ID NO: 504:
50
           (i) SEQUENCE CHARACTERISTICS:
                (A) LENGTH: 22 amino acids
                 (B) TYPE: amino acid
                (D) TOPOLOGY: linear
55
           (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 604:
     Asn Glu Asn Ala Asp Gly Sar Phe Asp Tyt Gly Leu Phe Gln Ile Asn
      1 5
                                   10
                                          15
60
    Ser His Tyr Trp Cys Asn
```

5	(2) INFORMATION FOR SEQ ID NO: 605:
10	(i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 27 amino acids (B) TYPE: amino acid (D) TOPOLOGY: linear (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 605:
15	Asn Leu Cys His Val Asp Cys Gln Asp Leu Leu Asn Pro Asn Leu Leu 1 5 10 15 Ala Gly Ile His Cys Ala Lys Arg Ile Val Ser 20 25
20	(2) INFORMATION FOR SEQ ID NO: 606:
25	(i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 13 amino acids (E) TYPE: amino acid (D) TOPOLOGY: linear (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 606:
30	Ile Arg Glu Val Asn Glu Val Ile Gln Asn Pro Ala Thr 1 5 10
35	(2) INFORMATION FOR SEQ ID NO: 607: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 30 amino acids (B) TYPE: amino acid
40	(D) TOPOLOGY: linear (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 607:
	Ile Thr Arg Ile Leu Leu Ser His Phe Asn Trp Asp Lys Glu Lys Leu 1 5 10 15
45	Met Glu Arg Tyr Phe Asp Gly Asn Leu Glu Lys Leu Phe Ala 20 25 30
50	(2) INFORMATION FOR SEQ ID NO: 608:
35	(i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 23 amino acids (B) TYPE: amino acid (D) TOPOLOGY: linear (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 608:
60	Asn Thr Arg Ser Ser Ala Gln Asp Met Pro Cys Gln Ile Cys Tyr Leu 1 5 10 15
1 11 1	The state of the s

Asn Tyr Pro Asn Ser Tyr Phe 20

5

(2) INFORMATION FOR SEQ ID NO: 609:

(i) SEQUENCE CHAPACTERISTICS:

(A) LENGTH: 60 amino acids

10 (B) TYPE: amino acid

(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 609:

Cys Asp Ilo Lou Val Asp Asp Asp Thr Val Mes Arg Leu Ile Thr Asp 15 10 15

Ser Lys Val Lys Leu Lys Tyr Gln His Leu Ile Thr Asn Ser Phe Val \$20\$

20 Glu Cys Asn Arg Leu Leu Lys Trp Cys Pro Ala Pro Asp Cys His His 35 40 45

Val Val Lys Val Glm Tyr Pro Asp Ala Lys Pro Val . 50 55 60

25

35

(2) INFORMATION FOR SEQ ID NO: 610:

30 (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 52 amino acids
- (B) TYPE: amino acid
- (D) TOPOLOGY: linear
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 610:

Cys Asp Ile Leu Val Asp Asp Asn Thr Val Met Arg Leu Ile Thr Asp 1 5 10 15

Ser Lys Val Lys Leu Lys Tyr Gln His Leu Ile Thr Asn Ser Phe Val

Glu Cys Asn Arg Leu Leu Lys Trp Cys Pro Ala Pro Asp Cys His His 35 40 45

45 Val Val Lys Val

50 (2) INFORMATION FOR SEQ ID NO: 611:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 60 amino acids
- (B) TYPE: amino acid
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 611:

Gly Cys Asn His Met Val Cys Arg Asn Gln Asn Cys Lys Ala Glu Phe 1 5 10 15

60

	Cys	Trp	Val	Cys	Leu	Gly	Pro	Trp	Glu 25	Pro	His	Gly	Ser	Ala 30	כבת	Tyr
5	Asn	Cys	Asn 35	Arg	Tyr	Asn	Glu	Азр 40	Àsp	Ala	Lys	Ala	Ala 45	Arg	Asp	Ala
	Gln	Glu 50	Arg	Ser	Arg	Ala	Ala 55	Leu	Gln	Arg	Tyr	Leu 60			•	
10																
	(2)	INF	ORMAC	MOIT	FOR	SEQ	ID 1	vo: 6	512:							
15			(i) . (xi)	()	A) L B) T D) T	enct YPE : OPOL	H: 6 ami CGY:	0 am no a lin	ino cid ear	acid		: 61	2 :			
20	Phe 1		Cys	Asn	Arg '5	Tyr	Met	Asn	His	Mec 10	Gln	Ser	Leu	Arg	Phe 15	Glu
25	His	Lys	Leu	Tyr 20	Ala	Gln	Val	Lys	Gln 25	Lys	Met	Glu	Glu	Мес 30	Gln	Gln
	His	 Asn	Mec 35	Ser	Trp	Ile	Glu	Val 40	Gln ;	Phe	Leu	Lys	Lys 45	Ala	Val	Asp
30	Val	20 Ten	Cys	Gln	Cys	Arg	Ala 55	Thr	Leu	Met	Tyr	Thr 60				
							,						,			
35	(2)		ORMAT	EQUE ()		CHAI ENGT	RACTI H:_6	ERIS: O am	rICS ino		s					
40			(xi)	(D) T	OPOL	OGY:	lin	ear	EQ II	ON C	: 61	3:			
	Ty z 1	Val	Phe	Ala	Phe 5	Tyr	Leu	Lys	Lys	Asn 10	Asn	Gln	Ser	Ile	Ile 15	Phe
45	Glu	Asn	Asn	Gln 20	Ala	Asp	Leu	Glu	Asn 25	Ala	Thr	Glu	Val	Leu 30	Ser	Gly
50	Tyr	Leu	Glu 35	Arg	qzA	Ile	Ser	Gln 40	Asp	Ser	Leu	Gln	Asp 45	Ile	Lys	Gln
	ГÀЗ	Val 50	Gln	Asp	Lys	Tyr	Arg 55	Ţŷī	Cys	Glu'	Ser	Arg 60				
55 ·	(2)	INFO	ORMAT	CION	FOP.	SEQ	ID N	10: 6	14:							
			(i) s	_							-					
60					A) Li B) T					acld	>					

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(D) TOPOLOGY: linear
            (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 614:
     Thr Gly Leu Glu Cys Gly His Lys Phe Cys Met Gln Cys Trp Ser Glu
             . 5
                                     10
     Tyr Leu Thr Thr Lys Ile Met Glu Glu Gly Met Gly Gln Thr Ile Ser
10
     Cys Pro Ala His Gly
              35
ì5
    (2) INFORMATION FOR SEQ ID NO: 615.
            (i) SEQUENCE CHARACTERISTICS:
                   (A) LENGTH: 21 amino acids
                   (B) TYPE: amino acid
20 .
                  (D) TOPOLOGY: linear
           (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 615:
     Met Trp Gly Tyr Leu Phe Val Asp Ala Ala Trp Asn Phe Leu Gly Cys
25
     Leu Ile Cys Gly Trp
                 20
30
     (2) INFORMATION FOR SEQ ID NO: 616:
            (i) SEQUENCE CHARACTERISTICS:
                   (A) LENGTH: 46 amino acids
35
                   (B) TYPE: amino acid
                   (D) TOPOLOGY: linear
            (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 616:
     Met His Phe Ile Ser Ser Gly Asn Val Ser Ala Ile Arg Ser Ser Ile
40
     Leu Leu Arg Xaa Ser Leu Ser Tyr Leu Gly Asn Cys Leu Arg Val
                             25
45
     Ser Ala Ile Phe Val Tyr Phe Leu Leu Phe Leu Leu Leu Ser
                             40
50
     (2) INFORMATION FOR SEQ ID NO: 617:
             (i) SEQUENCE CHARACTERISTICS:
                   (A) LENGTH: 80 amino acids
                   (B) TYPE: amino acid
55
                   (D) TOPOLOGY: linear
            (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 617:
     Met Asp Gln Ala Leu Arg Gly Ser Pro Ser Glu Gly Phe Ser Thr Asp
```

60

•	Pro	Ser	Pro	Pro 20	Gln	Val	Gly	Arg	Gln 25	Ile	Pro	Ser	Fhe	Pro	520	Trp
. 5	Arg	Arg	Leu 35	Val	Leu	Pro	Lys	Ala 40	Ser	Gly	Cys	Phe	Leu 45	Glů	Arg	Glu
	ŢŢP	Trp 50	Leu	Cys	Val	Phe	Lys 55	Leu	Arg	Thr	Arg	Pro 60	Gly	Ala	Glu	Ala
10	His 65		Tyr	Asn	Ser	Ser 70	Ile	Leu	Gly	Gly	Arg 75	Gly	Lys	Gly	Ile	Thr 80
15								·								
20	(2).			SEQUI	, ENCE A) L	CHAI	PACTI H: 1	NO: 6 ERIS 31 am no a	rics mino		ds					
25			(xi)					lin PTIO		EQ II	D NO	: 61	8:			
	Met 1	Leu	Pro	Ala	Leu 5	Ala	Ser	Cys	; ;	His 10	Phe	Ser	Pro	Pro	Glu 15	Gln
30	Ala	Ala	Arg	Leu 20	Lys	Lys	Leu	Gln	Glu 25	Gln	Glu	Lys .·	Gln	Gln 30	Lys	Val
	Glu	Phe	Arg 35	Lys	Arg	Met	Glu	Lys 40	Glu	Val	Ser	Asp	Phe 45	Ile	Gln	qzA
35	Ser	Gly 50	Gln	Ile	Lys	Lys	Lys 55	Phe	Gln	Pro	Mec	Asn 60	Lys	Ile	Glu	Arg
40	Ser 65	Ile	Leu	His	qzA	Val 70	Val	Glu	Val	Ala	Gly 75	Leu	Thr	Ser	Phe	Ser 80
	Phe	Gly	Glu	Asp	Asp 85	qzA	Cys	Arg	Tyr	Val 90	Met	Ile	Phe	Lys	Lys 95	Glu
45	Phe	Ala	Pro	Ser 100	Asp	Glu	Glu	Leu	Asp 105		Tyr	Arg	Arg	Gly 110	.Glu	Glu
	Trp	qzA	Pro 115	Gln	Lys	Ala	Glu	Glu 120	Lys	Arg	Asn	Xaa	Lys 125	Glu	Leu	Ala
50	Gln	Arg 130	Gln							•	•					
55	(2)			: SEQU	ENCE	CHAI	RACT:	NO: 6	rics	:						
, 60				(B) T	YPE:	ami	6 am no a lin	cid	acid	s					

(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 619:

Glu Glu Glu Ala Ala Gln Gln Gly Pro Val Val Val Ser Pro Ala Ser 10

5

Asp Tyr Lys Asp Lys Tyr Ser His Leu Ile Gly Lys Gly Ala Ala Lys 20

10

Asp Ala Ala His Met Leu Gln Ala Asn Lys Thr Tyr Gly Cys Xaa Pro

Val Ala Asn Lys Arg Asp Thr Arg Ser Ile Glu Glu Ala Mec Asn Glu 55 .

15 Ile Arg Ala Lys Lys Arg Leu Arg Gln Ser Gly Glu

- 20 (2) INFORMATION FOR SEQ ID NO: 620:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 40 amino acids
 - (B) TYPE: amino acid

25

30

- (D) TOPOLOGY: linear
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 620:

Pro Pro Arg Arg Pro Ala Gln Leu Pro Leu Thr Pro Gly Ala Gly Gln

Gly Ala Gly Arg Asp Lys Ala Ala Ala Ile Arg Ala His Pro Gly Ala 25

Pro Pro Leu Asn His Leu Leu Pro 3:5 35

- (2) INFORMATION FOR SEQ ID NO: 621: 40
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 28 amino acids
 - (B) TYPE: amino acid
 - (D) TOPOLOGY: linear

45 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 621:

> Ala Val Pro Gln Ala Gly Gly Lys Gln Val Phe Asp Leu Ser Pro Leu 10

- Glu Leu Gly Tyr Val Arg Gly Met Cys Val Cys Val 20 . 25
- 55 (2) INFORMATION FOR SEQ ID NO: 622:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 207 amino acids
 - (B) TYPE: amino acid
- 60 (D) TOPOLOGY: linear

			(xi)	SEQ	UENC:	E DE.	SCRI	PTIO	N: 5	EQ I	ON C	: 62	2 :			
5	Met 1	Leu	Pro	Ala	Leu 5	Ala	Ser	Cys	Cys	His 10	Phe	Ser	Pro	Pro	Glu 15	Gln
	Ala	Ala	Arg	Leu 20	Lys	Lys	Leu	Gl'n	Glu 25	Gln	Glu	Lys	Gln	Gln 30	Lys	Val
10	Glu	Phe	Arg 35	Lys	Arg	Met	Glu	Lýs 40	Glu	Val	Ser	Asp	Phe 45	Ile	Gln	Asp
	Ser	Gly 50	Gln	Ile	Lys	Lys	Lys 55	Phė	Gln	Pro	Met	Asn 60	Lys	Ile	Glu	Arg
15	Ser 65	Ile	Leu	His	Asp	Val 70	Val	Glu	Val	Ala	Gly 75	Leu	Thr	Ser	Phe	Ser 80
20	Phe	Gly	Glu	Asp ·	qzA 85	Asp	Cys	Arg	Tyr	Val 90	Met	Ile	Phe	Lys	Lys 95	Glu
	Phe	Ala	Pro	Ser 100	Ąsp	Glu	Glu	Leu	Asp 105	Ser	Tyr	Arg	Arg	Gl <u>y</u> 110	Glu	Glu
25	Trp	Asp	Pro 115	Glņ	Lys	Ala	Glu	Glu 120	Lys	Arg _.	Asn	Хаа	Lys 125	Glu	Leu	Ala
	Gln	Arg 130	Gln	Glu	Glu	Glu	Ala 135	Ala	Ġln	Gln	Gly	Pro 140	Val	Val	Val	Ser
30	Pro 145	Ala	Ser	Asp	Tyr	Lys 150		Lys	Tyr	Sez	His 155	Leu	Ile	Gly	Lys	Gly 160
35	Ala _.	Ala	Lys	qzA	-Ala 165	Ala	His	Met	Leu	Gln 170	Ala	Asn ·	Lys	Thr	Tyr 175	Gly
	Cys	Xaa	Pro	Val 180	Ala	Asn	Lys	Arg	Asp 185	Thr	Arg	Ser	Ile	Glu 190	Glų	Ala
40	Met	Asn	Glu 195	Ile	yra	Ala	Lys	Lys 200	Arg	Leu	Arg	Gln	Ser 205	Gly	Glu	
45	(2)	INFO	DRMAT	MOIS	FOR	SEQ	ID I	NO: 6	523 :							
			(i)	(.	A) L B) T	ENGT YPE:	H: 3 ami	ERIS 4 am no a	ino cid		s					
50			(xi)					lin PTIO		EQ II	D NO	: 62	3:			
	Leu 1	Leu	Cys	Pro	Val 5	Leu	Asn	Ser	GJÀ	Xaa 10	Ser	<u>dzī</u>	Asn	Phe	Pro 15	His
55	Pro	Ser	Gln	Pro 20	Glu	Tyr	Ser	Phe	His 25	Gly	Phe	His	Ser	Thr 30	Arg	Leu

Trp Ile

	(2)	INF	DRMA	CION	FOR	SEQ	ID 1	10: 6	24:										
5			(i)	_			RACT: H: 2				ς.								
							ami				~								
				(D) T	OPOD	OGY :	lin	ear				:						
10			(xi)	SEQ	UENC:	E DE	SCRI	PTIO	N: Si	EQ I	ON C	: 62	4:						•
10	_				_		_		_	_									
		Ser	Thr	Pro	_	Phe	Leu	Phe	Leu		GīĀ	Leu	Thr	Cys		Phe			
	1				5					10		•			15				
	Ser	Thr	Ser	His	Pro	Ara	Trp	Asp	Ser	Ile	Pro	Pro							
i 5				20		3	٠		25										
20	(2)	INF	ORMAI	MOIT	FOR	SEQ	ID 1	10: 6	525:			•							
20			(1)	SEOIT		CHA	RACTI	יי ד פי	ידרכ										
			\ / .	-			H: 2				ds								
							ami												
				(D) T	OPOL	OGY :	lin	ear										
25			(xi)	SEQ	UENC:	E DE	SCRI!	PTIO	N: S	EQ II	ON C	: 625	5: .						
	0 3		_		_		_		<u>.</u>		_								
	Glu 1	Leu	Ser	Ile	Ser 5		Ser	Asn	Val	Ala 10	Leu	ΑŢΑ	qzA	Glu		Glu			
	÷				2					10					15				
30	Tyr	Thr	Cvs	Ser	Ile	Phe	Thr	Met	Pro	Val	Arc	Thr	Ala	Lvs	Ser	Leu		•	
	-		-	20			,		25		_			30					
													,						
	Val	Thr		Leu	Gly	Ile	Pro		Lys	Pro	Ile	Ile		Gly	Tyr	Lys			
35			35					40					⁴⁵						
55	52~	Sa~	Lau) ~~	C3.,	Lvc	Asp	Th-	212	Th-	ī aı,	A ===	Cir	Cl-	c		•		
		50	Dea	Arg	Giu	Lys	توهم 55	1111	·		Dea	60	Cys		ser	261			
		,					-												
	Gly	Ser	Lys	Pro	Ala	Ala	Arg	Leu	Thr	Trp	Arg	Lys	Gly	Asp	Gln	Glú			
40	65					70					75					08			-
	_																		
	Leu	Hls	Gly	Glu		Thr	Arg	Ile	Gln		Asp	Pro	Asn	-		Thr			
					85					90					95				
45	Phe	Thr	Val	Ser	Ser	Ser	Val	Thr	Phe	Gln	Val	Thr	Ara	Glu	Aso	Asn			
				100					105				3	110					
	Gly	Ala	Ser	Ile	Val	Cys	Ser	Val	Asn	His	Glu	Ser	Leu	Lys	Gly	Ala			
50			115					120					125				•		
50		>	C			-1-		-1	- 1.	7	• -		-1	_					
	ASD	AFG 130	2ez	Thr	Ser	Gin	Arg	TTE	GLU	val	Leu	140	Thr	PTO	Thr	Ala			
		-10					135					740							
	Met	Ile	Arg	Pro	Asp	Pro	Pro	His	Pro	Arg	Glu	Gly	Gln	Lys	Leu	Leu			
55	145		-			150				-	155	-		• -		150			
				·												•			
	Leu	His	Cys	Glu		Arg	Gly	Asn	Pro		Pro	Gln	Gln	Tyr		Trp			
		•			165					170					175				
60	C1	T 1	C3-	<u></u>	~ · · ·	**= 3	D	D		7	34.5 -	æl:	~? -	<i>د</i> م	_				*
	GTU	กังล	GIU	GTĀ	>er	vat	Pro	PTO	∟eu	-ys	Me C	Tur	GTU	GTU	ser	ALA			

				130					185					190		
5	Leu	Ile	Phe 195	Pro	Phe	Геп	Asn	Lys 200	Ser	Asp	Ser	Gly	Thr 205	Tyr	Gly	Cys
-	Thr	Ala 210		Ser	Asn		Gly 215	Ser	Tyr	Lys	Ala	Тут 220	Tyr	Thr	Leu	Asn
10	Val 225	Asn	qzA												,	
15	(2)	INF		SEQU ()	ENCE A) L B) T	CHAI ENGT YPE:	RACT H: 6	NO: 6 ERIS 4 am no a	TICS ino cid		: :S					
20			(xi)					lin PTIO		EQ I	D NO	: 62	6 :			
	Glu 1	Leu	Ser	Ile	Ser 5	Ile	Ser	Asn	Val	Ala 10	Leu	Ala	Asp	Glu	Gly 15	Glu
25	Tyr	Thr	Cys	Sar 20	Ile	Phe	Thr	Met	Pro 25	Val	Arg	Thr	Ala	Lys 30	Ser	Leu
30	Val	Thr	Val 35	Leu	Gly	Ile	Pro	Gln 40	Lys	Pro	Ile	Ile	Thr 45	Gly	Tyr	Lys
	Ser	Ser 50		Arg	Glu	Lys	Asp 55	Thr	Ala	The	Leu	Asn 60	Cys	Gln	Ser	Ser
35			,											_		
40	(2)	INF		UQZZ)	ENCE A) L	CHA ENGT	RACT H: 6	NO: (ERIS' 5 am no a	TICS ino		s					
45			(xi)					lin PTIO		EQ I	D NO	: 62	7 <u>:</u>		•	
	Cys 1		Ser	Ser	Gly 5	Ser	Lys	Pro	Alá	Ala 10	Arg	Leu	Thr	Trp	Arg 15	Lys
50	Gly	Asp	Gln	Glu 20	Leu	His	Gly	Glu	Pro 25	Thr	Arg	Ile	Gln	Glu 30	Asp	bro
55	Asn	Gly	Lys 35	Thr	Phe	Thr	Val	Ser 40	·Ser	Ser	Val	The	Phe 45	Gln	. Val	Thr
	Arg	Glu 50		Asp	Gly	Ala	Ser 55	Ile	Val	Cys	Ser	Val 60	Asn	His	Glu	Ser
60	Leu															

```
(2) INFORMATION FOR SEQ ID NO: 628:
 5
            (i) SEQUENCE CHARACTERISTICS:
                   (A) LENGTH: 58 amino acids
                   (E) TYPE: amino acid
                  (D) TOPOLOGY: linear
10
            (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 628:
     His Glu Ser Leu Lys Gly Ala Asp Arg Ser Thr Ser Gln Arg Ile Glu
             5
15
     Val Leu Tyr Thr Pro Thr Ala: Met Ile Arg Pro Asp Pro Pro His Pro
                          25
     Arg Glu Gly Gln Lys Leu Leu His Cys Glu Gly Arg Gly Asn Pro
20
     Val Pro Gln Gln Tyr Leu Trp Glu Lys Glu
        50
                         55
25
     (2) INFORMATION FOR SEQ ID NO: 629:
           (i) SEQUENCE CHARACTERISTICS:
                  (A) LENGTH: 52 amino acids
30
                  (B) TYPE: amino acid
                  (D) TOPOLOGY: linear
            (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 629: '
     Trp Glu Lys Glu Gly Ser Val Pro Pro Leu Lys Met Thr Gln Glu Ser
35
     Ala Leu Ile Phe Pro Phe Leu Asn Lys Ser Asp Ser Gly Thr Tyr Gly
                 20
                       . 25
     Cys Thr Ala Thr Ser Asn Met Gly Ser Tyr Lys Ala Tyr Tyr Thr Leu
             35
                        . 40
     Asn Val Asn Asp
         50
45
     (2) INFORMATION FOR SEQ ID NO: 630:
50
            (i) SEQUENCE CHARACTERISTICS:
                   (A) LENGTH: 123 amino acids
                   (B) TYPE: amino acid
                  (D) TOPOLOGY: linear
            (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 630:
55
     Val Pro Glu Leu Pro Asp Arg Val His Gln Leu His Gln Ala Val Gln
                                      10
     Gly Cys Ala Leu Gly Arg Pro Gly Phe Pro Gly Gly Pro Thr His Ser
60
                              25
```

	GJĀ	His	His 35	Lys	Ser	His	Pro	Gly 40	Pro	Ala	Gly	Gly	Asp 45	Tyz	Asn	Arg
5	Cys	Asp 50	Arg	Pro	GĮY	Gln	Val 55	His	Leu	His	Asn	220 60	Arg	Gly	Thr	Gly
10	<u>A_rg</u> 65	Arg	Gly	Gln	Leu	His 70	Pro	Thr	Ala	Gly	Pro 75	Gly	Val	His	Arg	Arg 80
	Ala	Cvs	Pro	Ser	Gln 85	Gln	Leu	Pro	His	Arg 90	Leu	Gly	Pro	Gly	Val 95	Pro
15	Cys	Pro	Ser	Pro 100	Ser	Leu	Thr	Pro	Val 105	Leu	Pro	Ser	TIP	Thr 110	Gln _.	Ser
	Trp	CAZ	Gly 115	Leu	Pro	GŢĀ	Tyr	Thr 120	Ser	Ser	Ser					
20	(2)	INF	ORMA:	PION	FOR	SEQ	ID I	NO: :	531:							
25			(i)	SEQU)))	ENCE A) L B) T D) T	CHA ENGT YPE : OPOL	RACT H: 2 ami OGY:	ERIS 2 am no a lin	TICS ino cid	acid		: 63	1:			
30	Val	His	Gln	Leu	His 5	Gln	Ala	Val	Glņ	Gly .10	Cys	Ala -	Leu	GJΆ	Arg 15	Pro
35	Gly	Phe	Pro	Gly 20	Gly	Pro							,			
	(2)	INF	AMSO	TION	FOR	SEQ	ID I	NO:	632:	•						
40			(<u>i</u>)	(A) L E) T	ENGT YPE :	H: 4 ami				s					
45			(xi)						N: S	EQ I	D NO	: 63	2:	-		
	Pro 1	Thr	His	Ser	Gly 5	His	His	ŗĀS	Ser	His 10	Pro	Gly	510	Ala	Gly 15	Gly
50	Asp	Tyr	Asn	Arg 20	Cys	Asp	Arg	Pro	Gly 25	Gln	Val	His	Leu	His 30	Asn	Pro
-	Arg	Gly	Thr 35	Gly	Arg	Arg	GJĀ	Gln 40	Leu	His						
55																
	(2)	INF	ORMA													
60			(1)						TICS ino		s					

		((ند:)	•-) TO	PE: POLO DES	GY:	line	ar	Q ID	NO:	633	:		•	
5	Leu !	His	Pro	Thr I	Ala (Gly	Pro (Gly	Val 1	His .	Arg .	Arg	Ala	Cys	Pro 15	Ser
10	Gln (Gln	Leu	Pro i 20	His .	Arg :	Leu	Gly	Pro (Gļ ^ý	Val	Pro	Cys	970 30	Ser	Pro
	Ser :	Leu	Thr 35	Pro '	Val .	Leu	Pro	Ser 40	Trp '	Thr	Gln	Ser	Trp 45	Cys	Gly	Leu
15	Pro (Gly 50	Tyr	Thr	Ser	Ser	Se <u>r</u> 55.									
20	(2)	,			Y) ri Jàce	CHAF ENGTI	ACTE	RIST 76 au	rICS: mino		is					
25			(xi)) T(PE: OPOLO DES	OGY:	line	ear	EQ II	ONO.	: 63	4:			
	Ser 1	Leu	Arg	Arg	Pro 5	Arg	Ser	Ala	Äla	Хаа 10	Gln	Thr	Leu	Thr	Thr 15	Phe
30	Leu	Ser	Ser	Val 20	Ser	Ser	Ala	Ser	Ser 25	Ser	Ala	Leu	Pro	Gly 30	Ser	Arg
35	Glu	Pro	Cys 35	Asp	Pro	Arg	Ala	Pro 40	510	Pro	Pro	Arg	Ser 45	Gly	Ser	Ala
	Ala	Ser 50		Cys	Ser	Cys	Cys 55		Ser	Cys	Pro	Arg 60	Arg	Arg	Ala	Pro
40	Leu 65		Ser	Pro	Arg	Gly 70	Ser	Lys	Arg	Arg	Ila 75	Arg	Gln	. Arg	Glu	Val 80
	Val	Asp	Leu	īĀī	Asn 85	Gly	Met	Cys	Leu	Gln 90	Gly	Pro	Ala	. Gly	Val · 95	Pro
45	Gly	Arg	Asp	Gly 100	Ser	Pro	Gly	Ala	Asn 105	GŢĀ	Ile	Pro	Gly	Thr 110		Gly
50	Ile	Pro	Gly 115	Arg	Asp	Gly	Phe	Lys 120		´Glu	Lys	Gly	Glu 125		Leu	Arg
30	Glu	Ser 130		e Glu	Glu	Ser	Trp 135		Pro	Asn	Tyr	Lys 140		r Cās	Ser	Tip
5 5	Ser 145		Leu	ı Asn	Tyr	Gly 150		Asp	Leu	. Gly	Lys 155		e Ala	e Glu	. Cys	Thr 160
	Phe	The	Lys	Met	Arg 165		Asn	Ser	: Ala	Leu 170		Val	. Le	ı Phe	Ser 175	Gly

60 Ser Leu Arg Leu Lys Cys Arg Asn Ala Cys Cys Gln Arg Trp Tyr Phe

				130					135					190			
Š	Thr	Phe	Asn 195	Gly	Ala	Glu	Cys	Ser 200	Gly	Pro	Leu	Pro	Ile 205	Glu	Ala	Ile	
J	Ile	Tyr 210	Leu	Asp	Gln	Gly	Ser 215	Pro	Glu	Met	Asn	Ser 220	Thr	Ile	Asn	Ile	
10 -	His 225	Arg	Thr	Ser	Ser	Val 230	Glu	Gly	Leu	Cys	Glu 235	Gly	Ile	Gly	Ala	Gly 240	
	Leu	Val	Asp	Val	Ala 245	Ile	Trp	Val	Gly	Thr 250	Cys	Ser	Asp	Tyr '	Pro 255	Lys	
15	Gly	Asp	Ala	Ser 260	Thr	Gly	Trp _.	Asn	Ser 265	Val	Ser	Àrg		.Ile 270	Ile	Glu.	
20	Сĵп	Leu	Pro 275	Lys													
	(2)	INF	ORMA!	rion	FOR	SEQ	ID 1	VO: (535 :								
25				(A) L B) T D) T	CHAI ENGT YPE:	H: 6 ami OGY:	l am no a lin	ino cid ear	açid							
30		•				E DE											
	Se≍ 1	Leu	Arģ	Arg	920 5	Arg	Ser	Ala	Ala	Xaa 10	Gln	Thr	Leu ,	Thr	Thr 15	Phe	
35	Leu	Ser	Ser	V≞1 20	Ser	Ser	Ala	Ser	Ser 25	Ser	Ala	Leu	Pro	Gly 30	Ser	Arg	
	Glu	Pro	Cys 35	Asp	Pro	Arg	Ala	Pro 40	Pro	Pro	Pro	A⊻g	Ser 45	Gly	Ser	Ala	
40	Ala	Ser 50		Cys	Ser	Cvs	Cys 55	Cys	Ser	Cys	Pro	Arg 60	Arg				
45	(2)	INF	ORMA:	TION	FOR	SEQ	ID I	NO:	636:		•						
50				(A) L B) T D) T	CHA ENGT YPE: OPOL E DE	H: 5 ami OGY:	2 am no a lin	ino cid ear	acid		: 63	б:				
	_	Ala	Pro	Leú		Ser	Pro	Arg	Gly		Lys	Arg	Arg	Ile		Gln	
55	l Arg	Glu	Val	Val 20	5 Asp	Leu	Tyr	Asn	Gly 25	10 Met	Cys	Leu		Gly · 30	15 Pro	Ala	
60	Gly	Val	Pro 35		Arg	qzA	Gly	Ser 40		GļĀ	Ala	Asn		Ile	Pro	Gly	

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Thr Pro Gly Ile
           50
  5
       (2) INFORMATION FOR SEQ ID NO: 637:
              (i) SEQUENCE CHARACTERISTICS:
 10
                    (A) LENGTH: 52 amino acids
                     (B) TYPE: amino acid
                     (D) TOPOLOGY: linear
              (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 637:
 15
       The Pro Gly Ile Pro Cly Arg. Asp Gly Phe Lys Gly Glu Lys Gly Glu
       Cys Leu Arg Glu Ser Phe Glu Glu Ser Trp Thr Pro Asn Tyr Lys Gln
 20
       Cys Ser Trp Ser Ser Leu Asn Tyr Gly Ile Asp Leu Gly Lys Ile Ala
                                  40
                                          45
       Glu Cys Thr Phe
 25
           50
       (2) INFORMATION FOR SEQ ID NO: 638:
 30
              (i) SEQUENCE CHARACTERISTICS:
                     (A) LENGTH: 66 amino acids
                     (B) TYPE: amino acid
                     (D) TOPOLOGY: linear
 35
            (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 638:
       Phe Thr Lys Met Arg Ser Asn Ser Ala Leu Arg Val Leu Phe Ser Gly
. 40
       Ser Leu Arg Leu Lys Cys Arg Asn Ala Cys Cys Gln Arg Trp Tyr Phe
       Thr Phe Asn Gly Ala Glu Cys Ser Gly Pro Leu Pro Ile Glu Ala Ile
 45
       Ile Tyr Leu Asp Gln Gly Ser Pro Glu Met Asn Ser Thr Ile Asn Ile
       His Arg
 50
       65 .
       (2) INFORMATION FOR SEQ ID NO: 639:
 55
```

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 51 amino acids

(B) TYPE: amino acid

(D) TOPOLOGY: linear

(Xi) SEQUENCE DESCRIPTION: SEQ ID NO: 639:

	Arg 1	Thr	Ser	Ser	Val 5	Glu	Gly	Leu	Cys	Glu 10	Gly	Ile	Gly	Ala	Gly 15	Leu
5	Val	Asp	Val	Ala 20	Ile	Trp	Val	Gly	Thr 25	Cys	Ser	Asp	Tyr	9±0 30	Lys	Gly
10	Asp	Ala	Ser 35	Thr	Gly	qrp	Asn	Ser 40	Val	Ser	Arg	Ile	Ile 45	Ile	Glu	Glu
	Leu	Pro 50	Lys		•							٠				•
15	(2)	INF	ORMAI	rion	FOR	SEQ	ID 1	NO: 6	540:				•			
20			(i)	(A) L	engt	H: 2		ino	: acid	s					
•			(xi)	(D) T	OPOL	OGY:	lin	ear	EQ I	ON C	: 640	0:	-		
25	Thr 1	Lys	Lys	Glu	Asn 5	Cys	Arg	Pro	Ala	Ser 10	Leu	Met	Asn	Ile	Asp 15	Thr
	Lys	Ile	Leu	Asn 20	Lys	Ile	Leu	Met	Asn 25	Gln						
30	/2)	The	ODM	PT-ON	FOR	ET0	<i>T</i> D 1	vo - 4								
35	(2)		ORMA:	SEQU)))	ENCE A) L B) T D) T	CHA ENGT YPE: OPOL	RACT H: 2 ami OGY:	ERIS 14 a no a lin	TICS mino cid ear	aci				•		
40	Mar		(xi) Asn											27=	. ~ 1.,	T- ~~
,	1	Cys	AD:I	Ten	5	TTE	Tys	vair	Vai	10	~-g	ALG		VII	15	192
45				20					25					30		Val
	Val	Ser	Glu 35	Leu	Gly	Pro	Ile	Val 40	Gln	Phe	Val	Lys	Ala 45	Lys	Gly	His
50	Ser	Leu 50	Ser	. Asp	Gly	Leu	Glu 55	Glu	Val	Gln	Lys	Ala 60	Glu	Met	Lys	Ala
	Tyr 65	Met	Glu	Leu	Val	Asn 70	Asn	Met	Leu	Leu	Thr 75	Ala	Glu	Leu	Tyr	Leu 80
55	Gln	ŢŢÞ	Cys	qzA ;	Glu 85	Ala	Thr ·	Val	Gly	Хаа 90	Ile	Thr	His	Хаа	Arg 95	Tyr
60	Gly	Ser	Pro	Тут 100	Pro	Trp	Pro	Leu	Хаа 105	His	Ile	Leu	Ala	Tyr 110	Gln	Lys.

	Gln	Trp	Glu 115	Val	Lys	Arg	Lys	Хаа 120	Lys	Ala	Ile	Gly	Trp 125	Gly	Lys	Lys	
5	Thr	Leu 130	Ysb	Gln	Val	Leu	Glu 135	Asp	Val	Asp	Gln	Cys 140	Cys	Gln	Ala	Leu	
	Ser 145	Gln	yrg	·Leu	Gly	Thr 150	Gln	Pro	Tyr	Phe	Phe 155	Asn	Lys	Gln	Pro	Thr 160	
10	Glu	Leu	Asp		Leu 165	Val	Phe	Gly	His	Leu 170	Tyr	Thr	Ile	Leu	Thr 175	Thr	
15	Gln	Leu	Thr	Asn 180	Asp	Glu	Leu	Ser	Glu 185	Lys	Val	Lys	Asn	Tyr 190	Ser	Asn	
	Leu	Leu	Ala 195	Phe	Cys	Arg	Arg	Ile 200	Glu	Gln	His	Tyr	Phe 205	Glu	Asp	Arg	
20	Gly	Lys 210	Gly	Arg	Leu	Ser										_	
25	(2)	INF		TION					•	٠							
			(i)	- (A) L B) T	ENGT	H: 4	14 an ino a			ls						
30				SEQ	UENC	E DE	SCRI		N: S	•							
	. 1				5					10					15		
35				20					25					Asn 30		. Val	
40	Val	. Ser	: Glu 35		Gly	Pro	Ile	• Val 40	. Gln	. Phe	· Val	Lys	i				
	(2)	INE	FORM	ATION	I FOR	SEÇ	ZD.	NO:	643:								
45			(<u>i</u>)		(A) ! (B) !	LENG TYPE	rh: : am				âs						
50	Phe	. V.			-				ON: S					ı Glı	ı Glı	ı Val	
		L			5	5	ŕ			10)				15	5	
55	Glr	ı Ly:	s Al	a Glu 20		: Lys	s Ala	a Tyr	r Met 25		ı Çe	ı Va.	l Ası	n Asi 30		. Leu	L
-	Le	ı Th	r Al.		ı Le	ı Tyr	Le	u Gli 40	n Tre	C.V.	s As	o Gli	1				

	(2) INFORMATION FOR SEQ ID NO: 644:
5 .	(i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 51 amino acids (E) TYPE: amino acid (D) TOPOLOGY: linear (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 644:
10	Leu Gln Trp Cys Asp Glu Ala Thr Val Gly Xaa Ile Thr His Xaa Arg 1 10 15
	Tyr Gly Ser Pro Tyr Pro Trp Pro Leu Xaa His Ile Leu Ala Tyr Gln 20 25 30
15	Lys Gln Trp Glu Val Lys Arg Lys Xaa Lys Ala Ile Gly Trp Gly Lys 35 40 45
20	Lys Thr Leu 50
25	(2) INFORMATION FOR SEQ ID NO: 645:
	(i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 43 amino acids (B) TYPE: amino acid (D) TOPOLOGY: linear (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 645:
30	Asp Gln Val Leu Glu Asp Val Asp Gln Cys Cys Gln Ala Leu Ser Gln 1 5 10 , 15
35	Arg Leu Gly Thr Gln Pro Tyr Phe Phe Asn Lys Gln Pro Thr Glu Leu 20 25 30
40	Asp Ala Leu Val Phe Gly His Leu Tyr Thr Ile 35
	(2) INFORMATION FOR SEQ ID NO: 646:
45	(i) SEQUENCE CHAPACTERISTICS: (A) LENGTH: 41 amino acids (B) TYPE: amino acid (D) TOPOLOGY: linear
	(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 645:
50	Leu Thr Thr Gln Leu Thr Asn Asp Glu Leu Ser Glu Lys Val Lys Asn 1 10 15
55	Tyr Ser Asn Leu Leu Ala Phe Cys Arg Arg Ile Glu Gln His Tyr Phe 20 25 30
•	Glu Asp Arg Gly Lys Gly Arg Leu Ser 35 40

```
(2) INFORMATION FOR SEQ ID NO: 647:
            (i) SEQUENCE CHAPACTERISTICS:
 5
                  (A) LENGTH: 70 amino acids
                  (B) TYPE: amino acid
                  (D) TOPOLOGY: linear
            (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 647:
10
     Met Xaa Xaa Xaa Asn Ser His Ile Thr Ile Phe Thr Leu Asn Val Asn
                                      10
     Gly Leu Asn Ala Pro Asn Glu Arg His Arg Leu Ala Asn Tro Ile Gln
       20 25
15
     Ser Gln Asp Gln Val Cys Cys Ile Gln Glu Thr His Leu Thr Gly Arg
     Asp Thr His Arg Leu Lys Ile Lys Gly Trp Arg Lys Ile Tyr Gln Ala
20
      50 . 55 60
     Asn Gly Lys Gln Lys Lys
25
     (2) INFOPMATION FOR SEQ ID NO: 548:
            (i) SEQUENCE CHARACTERISTICS:
30
                  (A) LENGTH: 28 amino acids
                  (B) TYPE: amino acid
                  (D) TOPOLOGY: linear
            (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 648:
     Phe Thr Leu Asn Val Asn Gly Leu Asn Ala Pro Asn Glu Arg His Arg
      1 5 10
     Leu Ala Asn Trp Ile Gln Ser Gln Asp Gln Val Cys
                 20
40
     (2) INFORMATION FOR SEQ ID NO: 649:
45
            (i) SEQUENCE CHARACTERISTICS:
                 (A) LENGTH: 17 amino acids
                  (B) TYPE: amino acid
                 · (D) TOPOLOGY: linear
            (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 649:
50
     Thr His Leu Thr Gly Arg Asp Thr His Arg Leu Lys Ile Lys Gly Trp
     Arg
55
```

(2) INFORMATION FOR SEQ ID NO: 650:

```
(i) SEQUENCE CHARACTERISTICS:
                 (A) LENGTH: 14 amino acids
                  (B) TYPE: amino acid
                 (D) TOPOLOGY: linear
 5
            (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 650:
     Gly Trp Arg Lys Ile Tyr Gln Ala Asn Gly Lys Gln Lys Lys
      1 5.
10
     (2) INFORMATION FOR SEQ ID NO: 651:
            (i) SEQUENCE CHARACTERISTICS:
15
                 (A) LENGTH: 54 amino acids
                  (B) TYPE: amino acid
               (D) TOPOLOGY: linear
            (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 651:
20
     Ile Tyr Ris Leu His Ser Trp Ile Phe Phe His Phe Lys Arg Ala Phe
                                     10
     Cys Met Cys Phe Ile Thr Met Lys Val Ile His Ala His Cys Ser Lys
25
     Leu Arg Lys Cys Xaa Asn Ala Gln Ile Ser Val Phe Cys Thr Thr Leu
      35 40 45
     Thr Ala Ser Tyr Pro Thr
30
       50
     (2) INFORMATION FOR SEQ ID NO: 652:
35
            (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 23 amino acids
                 (B) TYPE: amino acid
                 (D) TOPOLOGY: linear
40
            (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 652:
     Ile Tyr His Leu His Ser Trp Ile Phe Phe His Phe Lys Arg Ala Phe
                     5
                          10
45
     Cys Met Cys Phe Ile Thr Met
                 20
50
     (2) INFORMATION FOR SEQ ID NO: 653:
            (i) SEQUENCE CHARACTERISTICS:
                  (A) LENGTH: 31 amino acids
                  (B) TYPE: amino acid
55
                  (D) TOPOLOGY: linear
            (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 653:
     Lys Val Ile His Ala His Cys Ser Lys Leu Arg Lys Cys Xaa Asm Ala
                                                                                5
                            10
60
```

Gln Ile Ser Val Phe Cys Thr Thr Leu Thr Ala Ser Tyr Pro Thr 20 25 5 (2) INFORMATION FOR SEQ ID NO: 654: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 58 amino acids 10 (B) TYPE: amino acid (D) TOPOLOGY: linear (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 654: Trp Asn Leu Leu Trp Tyr Phe Gln Arg Leu Ard Leu Pro Ser Ile Lou 15 5 ' 10 Pro Gly Leu Val Leu Ala Ser Cys Asp Gly Pro Ser Xaa Ser Gln Ala 20 Pro Ser Pro Trp Leu Thr Pro Asp Pro Ala Ser Val Gln Val Arg Leu 40 . 45 Leu Trp Asp Val Leu Thr Pro Asp Pro Asn 50 25 (2) INFORMATION FOR SEQ ID NO: 655: 30 (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 54 amino acids (B) TYPE: amino acid
(D) TOPOLOGY: linear (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 655: 35 Gln Arg Gly Ile Tyr Arg Glu Ile Leu Phe Leu Thr Met Ala Ala Leu 10 Gly Lys Asp His Val Asp Ile Val Ala Phe Asp Lys Lys Tyr Lys Ser 40 Ala Phe Asn Lys Leu Ala Ser Ser Met Gly Lys Glu Glu Leu Arg His 40 45 Arg Arg Ala Gln Met Pro 50 50 (2) INFORMATION FOR SEQ ID NO: 656: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 23 amino acids (B) TYPE: amino acid 55 (D) TOPOLOGY: linear (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 656: Trp Asn Leu Trp Tyr Pne Gln Arg Leu Arg Leu Pro Ser Ile Leu 10 60

Pro Gly Leu Val Leu Ala Ser 20

-5	(2)	INFO	ORMAI	CION	FOR	SEQ	ID P	NO: 6	57:				٠			
10				· (.	A) Li B) T D) T	engt YPE : OPOL	H: 1 ami: CGY:	ERIST 91 au no a lin PTIO	mino cid ear	aci		: 65	7:			
15	Glu 1	qzA	Asp	Gly	Phe 5	Asn	Arg	Ser	Ile	His 10	Glu	Val	Ile	Leu	Lys .15	Ası
	Ile	Thr	ŢŢ	Тут 20	Ser	Glu	Àrg	Val	Leu 25	Thr	Glu	Ile	Ser	Leu 30	GIA	Sei
20	Leu	Leu	Ile 35	Leu	Val	Val	Ile	Arg 40	Thr	Ile	Gln	Tyr	Asn 45	Met	Thr	Arg
25	Thr	Arg 50		Lys	Tyr	Leu	His 55	Thr	Asn	Cys	Leu	Ala 60		Leu 	Ala	Asi
	Met 65	Ser	Ala	Gln	Phe	Arg 70		Leu	His	Gln	Tyr 75	Ala	Ala	Gln	Arg	Ile 80
30	Ile	Ser	Leu		Ser 85	Leu	Leu	Ser		Lys 90	His	Asn	Lys	Val	Leu 95	Glv
	Gln	Ala	Thr	Gln 100	Ser	Leu	Arg	Gly	Ser 105	Leu	Ser	Ser	Asn	Aşp 110	Val	Pro
35	Leu	Pro-	Asp 115	Tyr	.Ala	Gln	Asp	Leu 120		Val	Ile	Glu	Glu 125	Val	Ile	Arq
40.	Met		Leu	Glu	Ile	Ile	Asn 135	Ser ,	Cys	Leu	Thr	Asn 140	Ser	Leu	His	His
40.	Asn 145		Asn	Leu	Val	Tyr 150		Leu		Tyr · ·			Asp	Leu		Gl:
45	Glņ	Phe	Arg	Thr	His 165	Pro	Ser	Phe	Gln	Asp 170		Met	Gln	Asn	Ile 175	Asī
	Leu	Val	Ile	Ser 180	Phe	Phe	Ser	Ser	Arg 185	Leu	Leu	Gln	Ala	Gly 190	Ser	
50	•											;				

(2) INFORMATION FOR SEQ ID NO: 658:

55

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 38 amino acids
- (B) TYPE: amino acid (D) TOPOLOGY: linear
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 658:
- 60 Glu Asp Asp Gly Phe Asn Arg Ser Ile His Glu Val Ile Leu Lys Asn

	1		5		10			15	
5	Ile Thr	Trp Tyr 20	Ser Glu A	rg Val	Leu Thr 25	Glu Ile	Ser Leu		Ser
J	Leu Leu	Ile Leu 35'	Val Val					-	
10	(2) INF	ORMATION	FOR SEQ I	D NO: 6	59:				
15		1)	NCE CHARA A) LENGTH B) TYPE: (D) TOPOLOC MENCE DESC	: 53 ami amino ac 3Y: line	no acid id ar		9 :		
20	Arg Thr	Ile Gln	Tyr Asn M 5	let Thr	Arg Thr 10	Arg Asp	Lys Tyr	Leu 15	His
	Thr Asn	Cys Leu 20	Ala Ala I	eu Ala	Asn Met 25	Ser Ala	Gln Phe		Ser
25_	Leu His	Gln Tyr 35	Ala Ala G	in Arg	Ile Ile	Ser Leu	Phe Ser 45	Leu	Leu
30	Ser Lys 50	Lys His	Asn				,		
	(2) INF	ORMATION	FOR SEQ I	D NO: 6	60:	•			
35		(1	INCE CHAPA A) LENGTH B) TYPE: (: 56 ami amino ac	no acid	s			
40		(xi) SEQU	JENCE DESC	RIPTION	i: SEQ I	D NO: 66	0:		
-	Ser Cys	Leu Thr	Asn Ser L 5	eu His	His Asn	Pro Asn	Leu Val	1 TYT	Ala
45	Leu Leu	Tyr Lys 20	Arg Asp I	eu Phe	Glu Gln 25	Phe Arg	Thr His		Ser
	Phe Gln	Asp Ile 35	Met Gln A	Asn Ile 40	Asp Leu	Val Ile	Ser Phe	e Phe	Ser
50	Ser Arg	Leu Leu	Gln Ala O	Sly Ser 55					
55	(2) INF	FORMATION	FOR SEQ 1	ID NO: 6	61:				
		_	ENCE CHAR						
		()	A) LENGTH	: 31 ami	lno acid	s			

(D) TOPOLOGY: linear

(mi) SEQUENCE DESCRIPTION: SEQ ID NO: 661: Lys Lys His Asn Lys Val Leu Glu Gln Ala Thr Gln Ser Leu Arg Gly 5 Ser Leu Ser Ser Asn Asp Val Pro Leu Pro Asp Tyr Ala Gln Asp 25 10 (2) INFORMATION FOR SEQ ID NO: 662: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 125 amino acids 15 (B) TYPE: amino acid (D) TOPOLOGY: linear (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 662: Met Ala Asp Ile Gln Thr Glu Arg Ala Tyr Gln Lys Gln Pro Thr Ile 20 5 . Phe Gln Asn Lys Lys Arg Val Leu Leu Gly Glu Thr Gly Lys Glu Lys Leu Pro Arg Val Thr Asn Lys Asn Ile Gly Leu Gly Phe Lys Asp Thr 25 Pro Arg Arg Leu Leu Arg Gly Thr Tyr Ile Asp Lys Lys Cys Pro Phe 30 Thr Gly Asn Val Ser Ile Arg Gly Arg Ile Leu Ser Gly Val Val Thr 70 Gln Asp Glu Asp Ala Glu Asp His Cys His Pro Pro Arg Leu Ser Ala 35 Leu His Pro Gln Val Gln Pro Leu Arg Glu Ala Pro Gln Glu His Val 40 Cys Thr Pro Val Pro Leu Leu Gln Gly Arg Pro Asp Arg 120 45 (2) INFORMATION FOR SEQ ID NO: 663: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 79 amino acids (B) TYPE: amino acid 50 (D) TOPOLOGY: linear (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 663: Met Lys Met Gln Arg Thr Ile Val Ile Arg Arg Asp Tyr Leu His Tyr 55 Ile Arg Lys Tyr Asn Arg Phe Glu Lys Arg His Lys Asn Met Ser Val 20 His Leu Ser Pro Cys Phe Arg Asp Val Gln Ile Gly Asp Ile Val Thr

```
Val Gly Tim Cys Ring Pro Len San Lys Thr Wel Aing File Aim Wel Len
      Nys Val Thr Dys Ala Ala Gly Thr Dys Dys Glin She Gir Dys Sha
68 70 78
10
      (I) DEFORMATION FOR EEQ ID NO: 664:
             (i) SEQUENCE CHARACTERISTICS:
                 (A) LENGTH: 30 smino estida
              (B) TOPOLOGY: linear
TOPOLOGY: linear
15
             (ML) FEQUENCE DESCRIPTION: SEQ ID NO: 664:
      Met Ale Asp The Gir Thr Gir Arg Ale The Gir Lys Tim Fro Tim Tie
20
      Phe Glm Asm Lys Lys Arg Val Let Let Gly Glu Thr Gly Lys
                  20 . 25
25
     (2) DEFORMATION FOR SEQ ID NO: 665:
             (i) seguence characteristics:
                   (A) LENGTH: 58 amino actids
30
                    (E) TIPE: smino acid
                   (D) TOPOLOGY: linear
             (%) SEQUENCE DESCRIPTION: SEQ ID NO: 665:
      Lys Lev Pro Arg Cal Thr Asm Lys Asm Tle Sly Lev Sly Pha Lys Asp
35
      The Pro Arg Arg Lew Lew Arg Gly The Typ Tle Arp Lys Lys Typ Pro
40
      Pha Thr Gly Asn'Val Ser Ile Arg Gly Arg Ile Leu Ser Gly Wal Wal
      The Glo Asp Glu Asp Ala Glu Asp His Cys
         50 - 55
45
      (2) DEFORMATION FOR SEQ ID NO: 666:
50
             (i) SEQUENCE CHRACTERISTICS:
                   (A) LENGTH: 38 amino arida
                    (E) TYPE: amino acid
                   (D) TOPOLOGY: linear
             (xi) SEQUENCE DESCRIPTION: SEQ ⊃ NO: 666:
55
     His Cys His Pro Pro Arg Leu Ser Ala Leu Eis Pro Gir Val Gir Pro
     Leu Arg Glu Ala Pro Gln Glu Ris Tal Cys Thr Pro Val Pro Leu Leu
60
```

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Gln Gly Arg Pro Asp Arg
             35
 5
      (2) INFORMATION FOR SEQ ID NO: 667:
            (i) SEQUENCE CHARACTERISTICS:
10
                   (A) LENGTH: 36 amino acids
                   (B) TYPE: amino acid
                   (D) TOPOLOGY: linear
            (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 667:
     Met Lys Met Gln Arg Thr Ile Val Ile Arg Arg Asp Tyr Leu His Tyr
      Ile Arg Lys Tyr Asn Arg Phe Glu Lys Arg His Lys Asn Met Ser Val
                                   -25
20
     His Leu Ser Pro
             35 .
25
      (2) INFORMATION FOR SEQ ID NO: 668:
            (i) SEQUENCE CHARACTERISTICS:
                  (A) LENGTH: 43 amino acids
30
                   (B) TYPE: amino acid
                  (D) TOPOLOGY: linear
            (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 668:
     Cys Phe Arg Asp Val Gln Ile Gly Asp Ile Val Thr Val Gly Glu Cys
35
                            10
      Arg Pro Leu Ser Lys Thr Val Arg Phe Asn Val Leu Lys Val Thr Lys
40
      Ala Ala Gly Thr Lys Lys Gln Phe Gln Lys Phe
            35 .... 40
45
    (2) INFORMATION FOR SEQ ID NO: 669:
             (i) SEQUENCE CHARACTERISTICS:
                  (A) LENGTH: 33 amino acids
                   (B) TYPE: amino acid
50
                  (D) TOPOLOGY: linear
            (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 669:
      Pro Arg Arg Leu Leu Arg Gly Thr Tyr Ile Asp Lys Lys Cys Pro Phe
55
      Thr Gly Asn Val Ser Ile Arg Gly Arg Ile Leu Ser Gly Val Val Thr
```

25 . 30

20

Gln

	(2) INFORMATION FOR SEQ ID NO: 670:	
5	(i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 60 amino acids (B) TYPE: amino acid (D) TOPOLOGY: linear	
10	(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 670:	•
-	Ile Phe Tyr Asp Ser Asp Trp Asn Pro Thr Val Asp Gln Gln Ala Met 1 5 10 .15 .	
15	Asp Arg Ala His Arg Leu Gly Gin Thr Lys Gln Val Thr Val Tyr Arg	
20	Leu Ile Cys Lys Gly Thr Ile Glu Glu Arg Ile Leu Gln Arg Ala Lys 35 40 45	
	Glu Lys Ser Glu Ile Gln Arg Met Val Ile Ser Gly 50 55 60	. •
25	(2) INFORMATION FOR SEQ ID NO: 671:	
30	(i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 67 amino acids (B) TYPE: amino acid (D) TOPOLOGY: linear (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 671:	
35	Thr Arg Met Ile Asp Leu Leu Glu Glu Tyr Met Val Tyr Arg Lys His 1 5 10 15	•
	Thr Tyr Xaa Arg Leu Asp Gly Ser Ser Lys Ile Ser Glu Arg Arg Asp 20 25 30	J
40	Met Val Ala Asp Phe Gln Asn Arg Asn Asp Ile Phe Val Phe Leu Leu 35 40 45	
45	Ser Thr Arg Ala Gly Gly Leu Gly Ile Asn Leu Thr Ala Xaa Asp Thr 50 55 60	
	Val His Phe 65	
50	(2) INFORMATION FOR SEQ ID NO: 672:	*
55	 (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 32 amino acids (B) TYPE: amino acid (D) TOPOLOGY: linear (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 672: 	
60	Ile Phe Tyr Asp Ser Asp Trp Asn Pro Thr Val Asp Gln Gln Ala Met 1 5 10 15	का का निकास

WO 98/54963 PCT/US98/11422

637

Asp Arg Ala His Arg Leu Gly Gln Thr Lys Gln Val 'Thr Val Tyr Arg . 25 5 10 (2) INFORMATION FOR SEQ ID NO: 673: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 31 amino acids (E) TYPE: amino acid 15 (D) TOPOLOGY: linear (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 673: Val Tyr Arg Leu Ile Cys Lys Gly Thr Ile Glu Glu Arg Ile Leu Gln 10 20 Arg Ala Lys Glu Lys Ser Glu Ile Gln Arg Met Val Ile Ser Gly 20 25 30 25 (2) INFORMATION FOR SEQ ID NO: 67,4: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 33 amino acids 30 (B) TYPE: amino acid (D) TOPOLOGY: linear (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 674: Thr Arg Met Ile Asp Leu Leu Glu Glu Tyr Met Val Tyr Arg Lys His 35 . 5 10 Thr Tyr Xaa Arg Leu Asp Gly Ser Ser Lys Ile Ser Glu Arg Arg Asp 40 Met 45 (2) INFORMATION FOR SEQ ID NO: 675: (i) SEQUENCE CHAPACTERISTICS: (A) LENGTH: 38 amino acids (B) TYPE: amino acid 50 (D) TOPOLOGY: linear (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 675: Arg Arg Asp Met Val Ala Asp Phe Gln Asn Arg Asn Asp Ile Phe Val 1.0 55 Phe Leu Leu Ser Thr Arg Ala Gly Gly Leu Gly Ile Asn Leu Thr Ala 25 20 Xaa Asp Thr Val His Phe

60

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(2) INFORMATION FOR SEQ ID NO: 676:
 5
             (i) SEQUENCE CHARACTERISTICS:
                    (A) LENGTH: 37 amino acids
                    (B) TYPE: amino acid
                    (D). TOPOLOGY: linear
10
             (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 676:
     Ile Phe Tyr Asp Ser Asp Trp Asm Pro Thr Val Asp Gln Gln Ala Met
15
     Asp Arg Ala His Arg Leu Gly Gln Thr Lys Gln Val Thr Val Tyr Arg
                                     25
     Leu Ile Cys Lys Gly .
             35
20
      (2) INFORMATION FOR SEQ ID NO: 677:
25
            (i) SEQUENCE CHARACTERISTICS:
                   (A) LENGTH: 37 amino acids
                    (B) TYPE: amino acid
                    (D) TOPOLOGY: linear
             (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 677:
30
      Ile Phe Tyr Asp Ser Asp Trp Asn Pro Thr Val Asp Gln Gln Ala Met
                  5
     Asp Arg Ala His Arg Leu Gly Gln Thr Lys Gln Val Thr Val Tyr Arg
35
      Leu Ile Cys. Lys Gly
             35
40
      (2) INFORMATION FOR SEQ ID NO: 678:
             (i) SEQUENCE CHARACTERISTICS:
45
                    (A) LENGTH: 29 amino acids
                    (B) TYPE: amino acid
                    (D) TOPOLOGY: linear
             (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 678:
50
      Arg Leu Ile Cys Lys Gly Thr Ile Glu Glu Arg Ile Leu Gln Arg Ala
      Lys Glu Lys Ser Glu Ile Gln Arg Met Val Ile Ser Gly
                  20
55
      (2) INFORMATION FOR SEQ ID NO: 679:
60
           (i) SEQUENCE CHARACTERISTICS:
```

_			(xi)	. (E) T D) T	ENGT YPE: OPOL E DE:	ami CGY:	no a lin	cid ear			: 679	9 :			
. 5	Met 1	Ser	Leu	His	Gly 5	Lys	Arg	Lys-	Glu	Ile 10	Tyr	Lys	Тут	Glu	Ala 15	Pro
10	Trp	Thr	Val	Ty z 20		Met	Asn	TYP	Ser 25	Val	Arg	Pro	Asp	Lys 30	Arg	Phe
	Arg	Leu	Ala 35	Leu	Gly	Ser	Phe	Val 40	Glu	Glu	Tyr	Asn	Asn 45	Lys	Val	Glįn
- 15	Leu	Val 50	Gly	Leu	Asp	Glu	Glu '55	Ser	Ser	Glu	Phe	Ila 60	Cys	Arg	Asn	Thr
20	Phe 65	Asp	His	Pro	Тут	Pro 70	Thr	Thr	Lys	Leu	Met 75	dī.	Ile	Pro	Asp	Thr 80
	Lys	Gly	Val	Tyr	PT0 85	qzA	Leu	Leu	Ala	Thr 90	Ser	Gly	Asp	Tyr	Leu 95	Arg
25	-		Arg	100					105					110		
	Asn	Asn	Lys 115	Asn	Ser	qaA	Phe	Cys 120	Ala	Pro	Leu	Thr	Ser 125	Phe	Asp	qrT
30		130	Val				135					140	,			
35	145		Ile			150	-				155					160
			Ser		165					170					175	-
40			Asp	180		-			185					190		
45			Val 195	_		_		200					205			
45		210					215					220		•		Leu
50	225		Leu			230					235					240
			qeA		245					250					255	
55	His	Leu	Xaa	260 :	Gly	Thr	Thr	Ile	Glu 265	His	Val	Ser	Met	Ala 270	Leu	Leu
60			His 275					280					285			•
60	Arg	Leu	Ser	Ser	Gly	Thir	Ser	Ser	Lys	Cys	Pro	Glu	Pro	Leu	Arg	Thr

60

690

		290)				295					300				
5	Leu 305	Ser	Txp	Pro	Thr	Gln 310	Leu	: Xaa	Gly	Glu	Ile 315		. Asn	. Val	Gln	Trp 320
•	Ala	Ser	Thr	Gln	2ro 325	Glu	Leu	. Ser	Pro	Ser 330		Thr	Thr	Thr	Ala 335	Trp
10	Arg	Tyr	Ser	Glu 340	Cys	Ser	Val	Gly	Gly 345		Val	Pro	Thr	Arg 350		Glý
	Leu	Leu	Ty:: 355	Phe	Leu	Pro	Leu	Pro 360	His	Pro	Gln	Ser				
15								:								
·	(2)	INF	ORMA	rion	FOR	SEQ	ID !	NO:	680:							
20				(A) L B) T D) T	ENGT YPE: OPOL	H: 1 ami OGY:	ERIS 36 a no a lin	mino cid ear	aci						
25								PTIO					•			
25	Met 1	Ser	Leu	His	Gly 5	Lys	Arg	Lys	Glu	Ile 10	TYT	Lys	Tyr	Glu	Ala 15	Pro
30	Trp	Thr	Val	Tyr 20	Ala	Met	Asn	Trp	Ser 25	Val	Arg	Pro	Asp	Lys 30	Arg	Phe
٠	Arg	Leu	Ala 35	Leu	Gly	Ser	Phe	Val 40	Glu	Glu	Tyr	Asn	Asn 45	'Lys	Val	Gln
35	Leu	Val 50	Gly	Leu	Asp	Glu	Glu 55	Ser	Ser	Glu	Phe ·	Ile 60	Cys	Arg	Asn ,	Thr
	Phe 65	Asp	His	Pro	Tyr	Pro 70	Ťbr	Thr	Lys	Leu	Met 75	Trp	Ile	Pro	Asp	Thr 80
40	Lys	Gly	Val	Tyr	Pro 85	qzA	Leu	Leu	Ala	Thr 90	Ser	Gly	qzA	Tyr	Leu 95	Arg
45	Val	Trp	Arg	Val 100	Gly	Glu	Thr	Glu	Thr 105	Arg	Leu	Glu	Cys	Leu 110	Leu	Asn
	Asn	Asn	Lys 115	Asn	Ser	Asp	Phe	Cys 120	Ala	Pro	Leu	Thr	Ser 125	Phe	Asp	Trp
50	Asn	Glu 130	Val	Asp	Pro		Leu 135	Leu								
55	(2)	INFO	RMAT	ION	FOR	SEQ	ID N	io: 6	81:		•					

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 140 amino acids (B) TYPE: amino acid (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 681:

v	Ser 1	Phe	Asp	TIP	Asn 5	Glu	Val	Ąsp	Pro	Tyr 10	Leu	Leu	Gly	Thr	Ser 15	Ser	
5	Ile	qzA	Thr	Thr 20	Cys	Thr	Ile	TIP	Gly 25	Leu	Glu	Thr	Gly	Gln 30	Val	Гел	
.0	Gly	Arg	Val 35	Asņ	Leu	Val	Ser	Gly 40	His	Val	Lys	Thr	Gln 45	Leu	Ile	Ala	
	His	Asp 50	Lys	Glu	Val	Tyr	Asp 55	Ile	Ala	Phe	Ser	Arg 60	Ala	Gly.	GĵÀ	Gly	
5	Arg 65	qzA	Met	Phe	Ala	Ser 70	Val	Gly :	Ala	Asp	Gly 75	Ser	Val	Arg	Met	Phe 80	
	qzA	Leu	Arg	His	Leu 85	Glu	His	Ser	Thr	Ile 90	Ile	Tyr	Glu	Asp	Pro 95	Gln	
20	His	His	Pro	Leu 100	Leu	Arg	Leu	Cys	Trp 105	Asn	Lys	Gln	Asp	Pro 110	Asn	Tyr	
25	Leu	Ala	Thr 115	M∈c	Ala	Met	Asp	Gly 120	Met	Glu	Val	Val	Ile 125	Leu	Asp	Val	
	Arg	Val 130	Pro	Ala	His	Leu	Kaa 135	Pro	Gly	Thr	Thr	Ile 140					
30	(2)	INFO	ORMAI	, TION	FOR	SEQ	ID 1	10: 6	582 :								
35				(:	A) L B) T D) T	ENGT YPE : OPOL	H: 1 ami: OG%:	70 a no a lin	mino cid ear	aci		60.	^	•			
	Val			SEQ										His	J.eu	Glu	
10	1	01,		وت.	5	002	•	9		10		202	9		15	CIU	
	His	Ser	Thr	Ile 20	Ile	Tyr	Glu	Asp	Pro 25	Gln	His	His	Pro	Leu 30	Leu	yzā	
15	Leu	Cys	Trp 35	Asn	Lys	Gln	Asp	P⊻0 40	Asn	Tyr	Leu	Ala	Thr 45	Met	Ala	Met	
50	Asp	Gly 50	Met	Glu	Val	Val	Ile 55	Leu	Asp	Val	Arg	Val 60	PTO	Ala	His	Leu	
	Хаа 65	Pro	Gly	Thr	Thr	Ile 70	Glu	His	Val	Ser	Мес 75	Ala	Leu	Leu	Gly	Pro 80	
55	His	Ile	His	Pro	Ala 85	Thr	Ser	Ala	Leu	Gln 90	Arg	Mec	The	Thr	Arg 95	Leu	
																•	
	Ser	Ser	Gly	Thr 100	Ser	Ser	ŗÀ2	Cys	Pro 105	Glu	Pro	Leu	Arg	Thr 110	Leu	Ser	

			115		•			120					125							
5	Thi	Gln 130	Pro	Glu	Leu	Ser	Pro 135	Ser	Ala	Thr	Thr	Thr 140	Ala	TIP	Arg	Tyr				
J	Ser 145	Glu	Cys	Ser	Val	Gly 150	Gly	Ala	Val	Pro	Thr 155	Arg	Gln	Gly	Leu	Leu 160				
10	Тут	Phe	Fen	Pro	Leu 155	Pro	His	Pro	Gln	Ser 170					-					
15	(2)	INF	OFMA	rion _.	FOR	SEQ	ID I	NO: (583:	٠										
13			(i)	• (A) L	CHAI ENGT YPE :	H: 2	36 a	mino		ds ,						,e. 1-	ww		
20			(xi)			OPOL E DE:				EQ I	D NO	: 68	3 :							
	Leu 1	Tyr	Ala	Thr	Ala 5	Thr	Val	Ile	.Se <u>r</u>	Ser 10	Pro	Se≍	Thr	Glu	Хаа 15	Leu				
25	Ser	Gln	qzA	Gln 20	Gly	Asp	Arg	Ala	Ser :25	Leu	Asp	Ala	Ala	Asp 30	Ser	Gly				•
30	Arg	Gly	Ser 35	Trp	Thr	Ser	Cys	Ser 40	Ser	Gly	Ser	His	Asp 45	Asn	Ile	Gln				
	The	Ile 50	Gln	His	Gln	Arg	Ser 55	Trp	Glu	Thr	Leu	PT0 60	Phe	GŢĀ	His	Thr				
35	His 65	Phe	Asp	Tyr	Ser	Gly 70	Asp	Pro	Ala	Gly	Leu 75	Trp	Ala	Ser	Ser	Ser 80				
	His	Met	qzA	Gln	Ile 85	Met	Pḥe	Ser	Asp	His 90	Ser	Thr	Lys	Tyr	Asn 95	Arg	,			
40	Gln	Asn	Gln	Ser 100	Arg	Glu	Ser	Leu	Glu 105	Gln	Ala	Gln	Ser	Arg 110	Ala	Ser				
45	TTP	Ala	Ser 115	Ser	Thr	Gly	Tyr	Trp 120	Gly	Glu	Asp	Ser	Glu 125	Gly	qeA	Thr				•
	Gly	Thr 130	Ile	Lys	Arg	Arg	Gly 135	Gly	Lys	qzA	Val	Ser 140	Ile	Glu	Ala	Glu				
50 .	Ser 145	Ser	Ser	Leu	Thr	Ser 150	Val	Thr	Thr	Glu	Glu 155	Thr	Lys	Pro	Val	Pro 160				
	Met	Pro	Ala	His	Ile 155	Ala	Val	Ala	Ser	Ser 170	Thr	Thr	Lys		Leu 175	Ile				
55	Ala	Arg	Lys	Glu 180	Gly	Arg	Tyr	Arg	Glu 185	Pro	Pro	Pro	Thr	PT0 190	Pro	Gly				
60	Tyr	Ile	Gly 195	Ile	Pro	Ile	Thr	Asp 200	Phe	Pro	Glu	Gly	His 205	Ser	His	Sig		5"	;	

	Ala	Arg 210	Lys	Pro	Pro	Asp	Tyr 215	Asn	Val	Ala	Leu	Gln 220	Arg	Ser	Arg	Mec
5	Val 225	Ala	Arg	Ser	Ser	Asp 230	Thr	Ala	Gly	Pro	Ser 235	Ser	Val	Gln	Gln	Pro 240
	His	Gly	His	Pro	Thr 245	Ser	Ser	Arg	Pro	Val 250	Asn	Lys	Pro	Gln	Trp 255	His
10	ГÀ2	Xaa	Asn	Glu 260	Ser	Asp	Pro	Arg	Leu 265	Ala	Pro	Tyr	Gln	Ser 270	Gln	Gly
15	Phe	Ser	Thr 275	Glu	Glu	Asp	Glu	Asp 280	Glu	Gln	Val	Ser-	Ala 285	Val	-	
	(2)	INF	ORMA:	MOIT	FOR	SEQ	ID N	NO: 6	584:				-			
20 .			(i) .	(A) L B) T	ENGT YPE :	H: 4 ami	ERIS 2 am no a lin	ino cid		s					
25						-						: 68				
	His 1	Met	Asp	Gln	Ile 5	Met	Phe	Ser	Yèb	His 10	Ser	Thr	Lys	Tyr	Asn 15	Arg
30	Gln	Asn	Gln	Ser 20	Arg	Gļu	Ser		Glu · 25		Ala	Gļn	Ser	30 Yrg	Ala	Ser
25	Trp	Ala	Ser 35	Ser	Thr	Gly	Tyr	T±p 40	GŢĀ	Glu				' -		
35	(2)	TNE	יבאתר	rion	FOR	SEO	י חד	viO + i	585.							
				SEQU!						:						
40				(A) L B) T D) T	ENGT YPE : OPOL	H: 5 ami CGY:	l am no a lin	ino cid ear	acid		.· : 68	5:	٠		
45	Ser 1	Val	Thr	Thr	Glu 5	Glu	Thr	Lys	Pro	Val 10	Pro	Met	Pro	Ala	His 15	Ile .
50	Ala	Val	Ala	Ser 20	Ser	Thr	The	Lys	Gly 25	Leu	Ile	Ala	Arg	Lys 30	Glu	Gly
-0	Arg	Tyr	Arg 35	Ģlu	Pro	Pro	Pro	Thr 40	Pro	Pro	Gly	Tyr	Ile 45	Gly	Ile	Pro
55	Ile	Thr 50	qzA													

(2) INFORMATION FOR SEQ ID NO: 686:

Xaa Val Arg

5			(3 (3 (2)) 12) 13) 13	TERRAC NOTE: PE: AT POLOGY DESCR	57 عم عامت عام : الم	nino Acid Near	acid		: 68:	6 :		-			
	Vai Ala 1	. Leu	GLm .	Arg S S	er Ar	g Xec	Val	<u>Ala</u> 10	Arg	Ser	Ser	Asp	Thr 15	Ala		
10	Gly Pto	Ser	Sar '	7al G	ik si	a Pro	His 25	Gly	His	Pro	Thr	Ser 30	Ser	Arg		
15	Pro Val	. Asn 35	Lys :	≓ro G	le Te	p His 40		Xaa	Asn	Glu	Ser 43	Asp	P⊻o	Ārg		
	Leu Ala 50		i Dat (Gin S	er Gli 5.	-	Phe									
20	(2) DE	or <u>c</u>	rion :	FOR S	ತ್ತು ೨೦	NO:	587.:		,							
25			(A (B (D) <u>(3</u>) TG) TG	TFAFAC NGTH: PE: am POLOGY DESCR	41 am ino s : lim	ino cid ear	acid		: 681	7 :					•
30	Cýs Leu 1	Leu	Phe '	Tal P	ha 7a	l Ser	Leu	Gly 10	Met	Arg	Cys	Leu	Phe 15	Trp		
	Thr Ile	Val	Ty≖ 2 20	isn V	al Le	ಗ ಮಾವ	Leu 25	Lys	His	Lys	Cys	ne.A 30	Thr	Val		
35	Leu Leu	. Cys 35	CAT :	His L	eu Cy:	s S ar -0	Ile									
40	(2) DG	OP142-1	TION T	FCR. 'S	EÇ ID	NC:	688:									
45			(A (E) (D)) LXI) LXI () (TEV	THARAC NOTH: PE: an POLOGY DESCR	67 am ino a : lin	ino cid ear	acid		. 688	3:					
50	Ala Cys 1	Ser	Lys i	Leu I 5	le Pro	o Ala	Phe	Glu 10	Met	Val	Met	Arg	Ala 15	Lys	<i>:</i>	
	yab yan	Val	Tyr 1 20	His L	eu As	p Cys	Phe 25	Ala	Cia	Gln	Leu	Cys 30	Asn	Gln		
55	Ary Kaa	C/s 35	Val (Jly A	sp Ly:	s Phe 40	Phe	Leu	Lys	Asn	Asn 45	Xaa	Хаа	Leu		
	SO CAR GTU		Asp 1	Pyr G	lu Gl: 5:		ŗen	Met	Lys	Glu 60	Gly	Tyr	Ala	Pro	•	

PCT/US98/11422 WO 98/54963

695

65

5	(2)	INFO	FMAT	CION	FOR	SEQ	ID N	iO: 6	: 95							
10				() () ()	A) Li B) T C) T	ENGT: YPE : OPOL	RACTE H: 49 ami: OGY: SCRIE	ami no ac line	ino a cid ear	acid		. 689	9:			
	Ser A	Ala	Leu	Ser	Glu 5	Pro	Gly	Ala	Pro	Asp 10	Arg	Arg	Arg	Pro	Cys 15	Pro
15	Glu :	Ser	Val·	Pro 20	Arg	Arg	Pro	: Asp	Asp 25	Glu	Gln	ŢΞĐ	Pro	Pro 30	Pro	Thr
20	Alai	Leu			qzA	Val	Ala	Pro 40	Leu	Pro	Pro	Ser	Ser 45			
25	(2)													,		
30				() () ()	A) L: B) T D) T	ENGT: YPE: OPOL	RACTI H: 4: ami: OGY: SCRII	3 am no a lin	ino cid ear	acid		. 696	n -			
	Pro '													.Val	Gln	Glu
	1			•	5					10	•				15	
35	Thr .	Asp	Arg	Ile 20	Leu	Val	Glu	Lys	Arg 25	Cys	Trp	Asp	Ile	Ala 30	Leu	Gly
40	Pro	Leu	Lys 35	Gln	Ile	Pro	Met	Asn 40	Leu	Phe	Ile					
	(2)	INFO	ORMA:	rion	FOR	SEQ	ID N	10 : (591:							
45			(i)	. (. ()	A) L B) T	ENGI YPE :	RACTE H: 2 ami OGY:	14 a	mino cid		.dsj					
50			(xi)	SEQ	UENC:	E DE	SCRI:	PTIO	N: S	EQ I	D NO	: 69	1:			
	Ala 1	His	Ala	Ser	Glu 5	Ser	Gly	Glu	Arg	T≆p 10	Trp	Ala	Cys	Cys	Gly 15	Val
55	Arg	Phe	Gly	Leu 20	Arg	Ser	Ile	Glu	Ala 25	Ile	Gly	Arg	Ser	Cys 30	Cys	His
	qzA	Gly	Pro	_	Gly	Leu	Val	Ala 40		Arg	Gly	Arg	Arg 45	Phe	Lys	מבד

60 Ala Ile Glu Leu Ser Gly Pro Gly Gly Gly Ser Arg Gly Arg Ser Asp

		50					55					60				
5	A <u>r</u> g 65	Gly	Ser	Gly	Gln	Gly 70	Asp	Ser	Leu	Ţŷī	Pro 75	Val	Gly	Tyr	Leu	qeA 08
,	Lys	Gln	Val	Pro	Asp 85	Thr	Ser	Val	Gln	Glu 90	Thr	Asp	Arg	Ile	Leu 95	Val
10	Glu	Lys	Arg	Cys 100	Trp	Asp	Ile	Ala	Leu 105	Gly	Pro	Leu	Lys	Gln 110	Ile	Pro
	Met	Asn	Leu 115	Phe	Ile	Met	Tyr	Met 120	Ala	Gly	Asn	Thr	Ile 125	Ser	Ile	Phe
15	Pro	Thr 130	Met	Met	Val	Cys	Met 135	Мес	Ala	Ţrp	Arg	Pro 140	Ile	Gln	Ala	Leu
20	Met 145	Ala	Ile	Ser	Ala	Th: 150	Phe	Lys	Met	Leu	Glu 155	Ser	Ser	Ser	Gln	Lys 160
	Phe	Leu	Gln	Gly	Leu 165	Val	Tyr	Leu	Ile	Gly 170	Asn	Leu	Met	Gly	Leu 175	Ala
25	Leu	Ala	Val	Tyr 180	Lys	Cys	Gln	Ser	Met 185	Gly	Leu	Leu	Pro	Thr 190	His	Ala
	Ser	qzA	Trp 195	Leu	Ala	Phe	Ile	Glu 200	Pro	Pro	Glu	Arg	Met 205	Glu	Phe	Ser
30	Gly	Gly 210	Gly	Leu	Leu	Leu		,		,				,		
35	(2)	INF	ORMA:	LIOÑ	FOR	SEQ	ID !	NO:	692:							
40			(i)	(A) I B) I	ENGT YPE :	H: 4 ami	6 am no a	ino cid		s					
40			(xi)) SEQ				lin PTIO		EQ I	D NO	: 69	2:			·
45	Ala 1	Thr	Phe	Lys	Met 5	Leu	Glu	Ser	Ser	Ser 10	Gln	Lys	Phe	Leu	Gln 15	Gly
	Leu	Va1	Tyż	Leu 20	Ile	Gly	Asn	Leu	Met 25	Gly	Leu	Ala	Leu	Ala 30	Val	Tyr
50	Lys	Cys	Gln 35	Ser	Met	`Gly	Leu	Leu 40	Pro	Thr	His	Ala	Ser 45	Asp		
55	(2)	INF		TION SEQU						•						
			/.	(A) I	.ENGI	H: 4	l3 am	ino		s					

(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 693:

	Pro Val Gly Tyr Leu Asp Lys Gln Val Pro Asp Thr Ser Val Gln Glu 1 5 10 15	
5	Thr Asp Arg Ile Leu Val Glu Lys Arg Cys Trp Asp Ile Ala Leu Gly 20 25 30	
10	Pro Leu Lys Gln Ile Pro Met Asn Leu Phe Ile 35 40	
10	(2) INFORMATION FOR SEQ ID NO: 694:	
15	(i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 48 amino acids (B) TYPE: amino acid	
20	(D) TOPOLCGY: linear (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 694:	
	Pro Thr Thr Lys Leu Asp Ile Met Glu Lys Lys His Ile Gln Ile 1 5 10 15	
25	Arg Phe Pro Ser Phe Tyr His Lys Leu Val Asp Ser Gly Arg Met Arg 20 25 30	
	Ser Lys Arg Glu Thr Arg Arg Glu Ásp Ser Asp Thr Lys His Asn Leu 35 . 40 45	
30		
35	(2) INFORMATION FOR SEQ ID NO: 695:	
	(i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 167 amino acids (B) TYPE: amino acid	
40	(B) TYPE: amino acid (D) TOPOLOGY: linear (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 695:	
45	Thr Glu His Ile Ile Ala Val Met Ile Thr Glu Leu Arg Gly Lys Asp 1 5 10 15	
	Ile Leu Ser Tyr Leu Glu Lys Asn Ile Ser Val Gln Met Thr Ile Ala 20 25 30	
50	Val Gly Thr Arg Met Pro Pro Lys Asn Phe Ser Arg Gly Ser Leu Val 35 40 45	
	Phe Val Ser Ile Ser Phe Ile Val Leu Met Ile Ile Ser Ser Ala Trp 50 55 60	
55	Leu Ile Phe Tyr Phe Ile Gln Lys Ile Arg Tyr Thr Asn Ala Arg Asp 65 70 75 80	
60	Arg Asn Gln Arg Arg Leu Gly Asp Ala Ala Lys Lys Ala Ile Ser Lys	- 1

	Leu	Thr	Thr	Arg 100		Val	Lys	Lys	Gly 105		Lys	Glu	Thr	Asp 110		qzA
5	Phe	Asp	His 115	Cys	Ala	Val	Cys	Ile 120		Ser	Tyr	Lys	Gln 125	Asn	Asp	Val
	Val	Arg 130	Ile	Leu	Pro	Cys	Lys 135	His	Val	Phe	His	Lys 140	Ser	Cys	Val	Asp
10	Pro 145		Leu	Ser	Glu	His 150	Cys	Thr	CÀR	Pro	Mec 155	Cys	ŗňz	Leu	Asn	Ile 150
15	Leu	Lys	Ala ,	Leu	Gly 165	Ile	Val	.								
	(2)	INF	ORMA	rion	FOR	SEQ	ID 1	NO: (696:							
20	,		(i) (xi)	(A) L B) T D) T	ENGT YPE : OPOL	H: 2 ami CGY:	76 a no a lin	mino cid ear	: aci EQ I		: 69	6:			
25	Met 1	Thr	His	Pro	Gly 5	Thr	Glu	His	∓le	Ile 10	Ala	Val	Met	Ile	Thr 15	Glu
30	Leu	Arg	Gly	Lys 20	qzA	Ile	Leu	Ser	Тут 25	Leu	Glu	Lys	Asn	Ile 30	Ser	Va1
	Gln	Met	Thr 35	Ile	Ala	Val	Gly	Thr 40	Arg	Met	Pro	Pro	Lys 45	Asn	Phe	Ser
35	Arg	Gly 50	Ser	Leu	Val	Phe	Val 55	Ser	Ile	Ser	Phe	Ile 60	Val	Leu	Met	Ile
40	Ile 65	Ser	Ser	Ala	Trp	Leu 70	Ile	Phe	Tyr	Phe	Ile 75	Gln	Lys	Ile	Arg	Tyr 80
	Thr	Asn	Ala	Arg	Asp 85	Arg	Asn	Gln	Arg	Arg 90	Leu	Glý	qzA	Ala	Ala 95	Lys
45	ŗĀ	Ala	Ile	Ser 100	Lys	Leu	Thr	Thr	Arg 105	Thr	Val	Lys	Lys	Gly 110	Asp	Lys
	Glu	Thr	Asp 115	Pro	Asp	Phe	Asp	His 120	Cys	Ala	Val ·.	Cys	Ile 125	Glu	Ser	Tyr
50	Lys	Gln 130	Asn	Asp	Val	Val	Arg 135	Ile	Leu	Pro	Cys	Lys 140	His _.	Val	Phe	His
5 5 ·	Lys 145	Ser	Cys	Val		Pro 150	Trp	Leu	Ser	Glu	His 155	Cys	Thr	Cys	Pro	Met 160
	Cys	Lys	Leu	Asn	Ile 165	Leu	Lys	Ala	Leu	Gly 170	Ile	Val	Pro	Asn	Leu 175	Pro
60 ·	Cys	Thr	ązĄ	Asn 180	Val	Ala	Phe	Asp	Met 185	Glu	Arg	Leu	Thr	Arg 190	Thr	Gln

	Ala	Val	Asn 195	Arg	<u>A</u> rg	Ser	Ala	Leu 200	Gļā	Asp	Leu	Ala	Gly 205	Asp	Asn	Ser			
5	Leu	Gly 210	Leu	Glu	Pro	Leu	Arg 215	Thr	Ser	Gly	Ile	Ser 220	Pro	Leu	Pro	Gln-	٠		
10	Asp 225	GJA	Glu	Leu	Thr	Pro 230	Arg	Thr	Gly	Glu	Ile 235	Asn	Ile	Ala	Val	Th <u>r</u> 240			
	ŗvs	Glu	Trp	Phe	Ile 245	Ile	Ala	Ser	Phe	Gly 250	Leu	Leu	Ser	Ala	Leu 255	Thr			
15	Leu	CÀ2	īàī	Met 260	Ile	Ile	Arg :	Ala	Thr 265	Ala	Ser	Leu	Asn	Ala 270	Asn	Glu			
	Val	Glu	Trp 275	Phe															
20																			
	(2)	INFO	ORMAI	MOI	FOR	SEQ	ID 1	10: (597:					•					
25			(i) :	(. (:	A) L B) T		H: 6 ami	9 am no a	çid	: acid	s	-			7 "			. * .	
			(xi)							EQ I	ON C	: 69	7:						
30	Thr 1	Glu	His	Ile	Ile 5	Äla	Val	Met	Ile	Thr 10	Glu	Leu	Arg	Gly	Lys 15	Asp			
3 <i>5</i>	Ile	Leu	Ser	Tyr 20	Leu	Glu	Lys	Asn	Ile 25	Ser	Val	Gln	Met	Thr 30	Île	Ala			
	Val	Gly	Thr 35	Arg	Met	Pro	Pro	Lys 40	Asn	Phe	Ser	Arg	Gly 45	Ser	Leu	Val			
40	Phe		Ser	ile	Ser	Phe	Ile 55	Val	Leu	Met	Ile	Ile 60	Ser	Ser	Ala	Trp			
	Leu 65	Ile	Phe	Tyr	Phe								. •				-		
45										•			•						
	(Ž)	INF	ORMAT	CION	FOR	SEQ	ÍD I	. OV	698:										
50			٠	(A) L B) T D) T	ENGT YPE : OPOL	H: 5 ami OGY:	8 am no a lin	cid ear	acid			C		٠		:		
<i>5 5</i>										EQ I		-							
55	Ser 1	Ile	Ser		Ile 5	Val	Leu	Met	Ile	Ile 10	Ser	Ser	Ala	dīī	Leu 15	Ile			
60	Phe	Tyr	Phe	Ile 20	Gln	Lys	Ile	Arg	Tyr 25	Thr	Asn	Ala	Yrg	Asp 30	Arg	Asn		۲.	

Gln Arg Arg Leu Gly Asp Ala Ala Lys Lys Ala Ile Ser Lys Leu Thr 40 Thr Arg Thr Val Lys Lys Gly Asp Lys Glu 50 55 (2) INFORMATION FOR SEQ ID NO: 699: 10 (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 66 amino acids (B) TYPE: amino acid (D) TOPOLOGY: linear 15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 699: Val Lys Lys Gly Asp Lys Glu Thr Asp Pro Asp Phe Asp His Cys Ala 20 Val Cys Ile Glu Ser Tyr Lys Gln Asn Asp Val Val Arg Ile Leu Pro 20 Cys Lys His Val Phe His Lys Ser Cys Val Asp Pro Trp Leu Ser Glu 25 His Cys Thr Cys Pro Met Cys Lys Leu Asn Ile Leu Lys Ala Leu Gly 50 55 Ile Val 30 65 (2) INFORMATION FOR SEQ ID NO: 700: 35 (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 106 amino acids (B) TYPE: amino acid (D) TOPOLOGY: linear 40 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 700: Met Thr His Pro Gly Thr Glu His Ile Ile Ala Val Met Ile Thr Glu 45 Leu Arg Gly Lys Asp Ile Leu Ser Tyr Leu Glu Lys Asn Ile Ser Val 20 25 Gin Met Thr Ile Ala Val Gly Thr Arg Met Pro Pro Lys Asn Phe Ser 40 50 Arg Gly Ser Leu Val Phe Val Ser Ile Ser Phe Ile Val Leu Met Ile 55 Ile Ser Ser Ala Trp Leu Ile Phe Tyr Phe Ile Gln Lys Ile Arg Tyr 55 70 Thr Asn Ala Arg Asp Arg Asn Gln Arg Arg Leu Gly Asp Ala Ala Lys 85 90

Lys Ala Ile Ser Lys Leu Thr Thr Arg Thr

70 I

•				100					105							
5	(2)	INF	ORMA	rion	FOR	SEQ	ID I	NO: .	701:							
10				(A) L B) T D) ·T	enct YPE : OPOL	H: 8 ami OGY:	4 am no a lin	cid ear	: acid EQ II		: 70	1:	•		
15	Ala 1	Ala	Lys	Lys	Ala 5	Ile	Ser	Lys	Leu	Thr 10	Thr	Arg	Thr	Val	Lys 15	Lys
*.	Gly	Asp	Lys	Glu 20	Thr	Asp	Pro	Asp	Phe 25		His	Cys	Ala	Val 30	Cys	Ile
20	Ģlu	Ser	Ť/T 35	Lys	Gln	Asn	qzA	Val 40	Val	Arg	Ile	Leu	Pro 45	Cys	Lys	His
	Val	Phe 50	His	Lys	Ser	Cys	Val 55	Asp	Pro	Trp	Leu	Ser 60	Glu	His	CĀR	Thr
25	Cys , 63	Pro	Met	Cys	Lys	Leu 70	Asn	Ile	Leu :	Lys	Ala 75	Leu	Gly	Ile	Val	2±0 08
30	Asn	Leu	Pro	Cys												
	(2)	INF	OFMA	TION	FOR	SEQ	ID 1	NO: '	702:					,		
35			(<u>i</u>)	(A) L B) T	ENGT YPE :	H: 8 ami	6 am no a	cid	: acid	s					•
40			(xi)		D) T UENC					EQ I	ON O	: 70	2:			
	Thr 1	Gln	Ala	Val	Asn 5	Arg	Arg	Ser	Ala	Leu 10	Gly	ęzς ,	Leu	Ala	Gly 15	Asp
45	Asn	Ser	Leu	Gly 20		Glu	Pro	Leu	Arg 25	Thr	Ser	Gly	Ile	Ser 30	Pro	Leu
	Pro	Gln	qzA 35	Gly	Glu	Leu	Thr	Pro 40	Arg	Thr	Gly	Glu	Ile 45	Aşn	Ile	Ala
50	Val	Th <u>~</u> 50	Lys	Glu	Trp	Phe	Ile 55	Ile	Ala	Ser	Phe	Gly 60	Leu	Leu	Ser	Ala
55	Leu 65	Thr	Leu	Cāz	Tyr	Mec 70	Ile	Ile	Arg	Ala	Thr 75	Ala	Ser	Leu	Asn	Ala 80

Asn Glu Val Glu Trp Phe

702

	2)		70719	-=:::	i FCI	? 5I(; ID	171:	703	:							
5					(A) ((B) ((C) (E CE LENG TYPE TOPOL TOPOL	i 211 106:	141 : im: : : 14:	amin: Asid Mair	s ac): 7(33:				
10	72: 1	i Le:	: His	: 31;	Val	. Ala	. Asp	: Kis	: Leu	: Gly 13		i Asp	: Pro	Glm	Thr 15		
	Phe	: Fhe	: 7al	. P ro 20	755) Asn	Il:	lys	31 . 25		: Ile	: XIa	Leu	: L∈u 30		Arg	
15	gly	· Ast	Cys 35	The	Fhe	Lys	Glä	Lys 40		Ser	. Arş	. Ala	45		His	Asn	
20	هــه	. Tal	Ala	. Val	Val	Ile	Tr/r 55	Asn	. Asn	Lys	Ser	Lys 50		Glu	Pro	Val	
	The 65	Mei	The	His	250	Gly T0	The	Slu	His	Ile	Tie 75		Val	Met	Ile	Thr 80	
25	3lu	Leu	Arg	Gly	Lys 25	ಸ್ತಾ	lle	Leu	Ser	Ty≈ 90	leu	glu	Lys	Asn	Ile 95		
	Wal	91E	Met	Th <u>+</u> 166	Ξle	Ala	Val	Bly	Thr 105	Arş	Met	7 7 0	320	Lys 110	Asn	Phe	
30	Ser	ЖŢ	Gly- 115	Ser	Leu	Val	Phe	Tal 120	Ser	Ile	Ser	Phe	Ile 125	Val	Leu	Met	
35	lie	71e -131	Ser	Ser	:La	شتق	Leu 135	Ile	Phe	īyz	Phe	11e 140	Gln	Lys	Ile	Arg	
	7yr 145		Asta	21a	æş	كټ 150	æş	Asr.	Gl.	Arş	A27 138	Lau	Gly	ąz£	Ala	Ala 160	
40	lys	Lys	Ala	Ile	Ser 185	L∵s	Leu	<u> </u>	The	Arg 171	The	Val	Lys	Lys	Gly 175	Asp	
	lys	51:	The second	Asp 180	PTO	Asp	Phe	Asp	His 185	Cys	Ala	Val	Cys	Ile 190	.Glu	Ser	
45	Tyr	Lys	9 <u>1-</u> 195	Ast	وعد	Val	Val	کتع 200	Ile	Leu	כבי?	Cys	Lys 205	His	Val	Phe	
50	Hįs	Lys 210	Ser	Су з	∵ <u>≥l</u>	ನಿತ್ತಾ	Pro 215	طتز	Leu	Ser	Glu	His 220	Cys	Thr	Cys	Pro	
	Mat 225	C'12	Lys	Leu	Asn	Ile 230	Leu	Lys	Ala _.	Leu	Gly 235	lle	Val	Pro	Asn	Leu 240	
55	320	CAR	The	Asp	Asn 245	Val	Ala	Phe		Met 250	ēļu	æg	Leu	Thr	Arg 255	Thr	
	Gia	Ala	V ≞	Ast 260	æg	λij	S er	Ale '	Leu 263	Gly	ಸಕಾ	Leu	Ala	Gly 270	Asp	Asn	
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Ser Let Gly Let Glu Pro Let Arg Thr Ser Gly Ile Ser Pro Let Pro

			275					280					285					
5	Gln	Asp 290	Gly	Glu	Leu	Thr	Pro 295	Arg	Thr	Gly	Glu	Ile 300	Asn	Ile	Ala	Val		
<i>J</i> .	Thr 305	Lys	Glu	Trp	Phe	Ile 310	Ile	Ala	Ser	Phe	Gly 315	Leu	Leu	Ser	Ala	Leu 320		
10	Thr	Leu	Cys	Tyr	Met 325	Ile	Ile	Arg	Ala	Thr 330	Ala	Ser	Leu	Asn	Ala 335	Asn	•	
	Glu	Val	Glu	Trp 340	Phe								•					•
15				-			•	:										
	(2)	INF	ORMAC	MOIT	FOR	SEQ	ID i	NO:	704 :	•		,						
20		•	•	(A) L B) T D) T	ENGT YPE: OPOL	H: 6 ami OGY:	0 am no a lin	ino cid ear	acid		: 70	4:					
25	His 1	Gly	Val	Ala	Asp 5	His	Leu	Gly	-	Asp . 10	Pro	Gln	Thr	Arg	Phe 15	Phe		
30	Val	Pro	Pro	Asn 20	Ile	Lys	Gln	Trp	Ile 25	Ala	Leu	Leu	Gln	Arg 30	Gly	Asn		
	Cys	Thr	Phe 35	Lys	Glu	Lys	Ile	Ser 40	Arg	Ala	Ala	Phe	His 45	Asn ,	Ala	Val		
35	Ala	Val 50	Val	Ile	Tyr	Asn	Asn 55		Ser	ŗàz	Glu	Glu 60	•					
40	(2)	INF	ORMA	rion	FOR	SEQ	ID !	NO: '	705:			•	·					
U			(i)	(A) L B) T		H: 3 ami	14 a	mino cid	: aci	ರೆಽ					٠		
45			(xi)	SEQ						EQ I	D NO	: 70	5:					
	Met 1		Gly	Gln	Gly 5	Leu	Ala	Gly	Phe	Phe 10	Ala	Ser	Val	Ala	-Mec 15	Ile		
50	Cys	Ala	Ile	Ala 20	Ser	Gly	Ser	Glu	Leu 25	Ser	Glu	Ser	Ala	Phe 30	Gly	Ţŷī		
55	Phe	Ile	Thr 35	Ala	Cys	Ala	Val	Ile 40		Leu	Thr	Ile	Ile 45	Cys	Tyr	Leu		
	Gly	Leu 50		Arg	Leu	Glu	Phe 55	īàr	Arg	Tyr	īyī	Gln 60	Gln	Leu	Lys	Leu		
60	Glu	Gly	220	GīĀ	Glu	Gln	Glu	Thr	Lys	Leu	Asp ==	Leu	Ile	Ser	Lys	Gly		÷.

	Glu Glu	Pro	Arg	Ala 85	Gly	Lys	Glu	Glu	Ser 90	Gly	Val	Ser	Val	Ser 95	Asn
5	Ser Glr	PTO	Thr 100	Asn	Glu	Ser	His	Ser 105	Ile	Lys	Ala	Ile	Leu 110	Lys	Asn
10	Ile Ser	Val 115	Leu	Ala	Phe	Ser	Val 120	Cys	Phe	Ile	Phe	Thr 125	Ile	Thr	Ile
	Gly Met		Pro	Ala	Val	Thr 135	Val	Glu	Val	Lys	Ser 140	Ser	Ile	Ala	Gly
15	Ser Ser 145	Thr	Trp	Glu	Arg 150	Tyr		Ile	Pro	Val 155	Ser	Cys	Phe	Leu	Th- 160
	Phe Asn	Ile	Phe	Asp 165	Trp	Leu	Gly	Arg	Ser 170	Leu	Thr	Ala	Val	Phe 175	Met
20	Trp Pro	Gly	Lys 130	gaA	Ser	Arg	Trp	Leu 185	Pro	Ser	Trp	Xaa	Leu 190	Ala	Arg .
25 .	Leu Val	Phe 195	Val	Pro	Leu	Leu	Leu 200	Leu	Cys	Asn	Ile	Lys 205	Pro	Arg	Arg
	Tyr Leu 210		Val	Val	Phe -	Glu 215	His	ýsb	Ala	Tip	Phe 220	Ile	Phe	Phe	Mec
30	Ala Ala 225	Phe	Ala	Phe	Ser 230	Asn	Gly	Tyr	Leu	Ala 235	Ser	Leu	Cys	Met	Cys 240
	Phe Gly	Pro		Lys -245	Val	Lys	Pro	Ala	Glu 250	Ala	Glu	Thr	Ala	Glu 255	Pro
35	Ser Trp	. Bio	Ser 250	Ser	Cys	Val	طتي	Val 265	Trp.	His	Trp	GŢĀ	Leu 270	Phe	Ser
40 .	Pro Ser	Cys 275		Gly	Gln	Leu	Cys 280	Asp	Lys	Gly	dzb	Thr 285	Glu	Gly	Leu
	Pro Ala 290		Leu	Pro	Val	Cys 295	Leu	Leu	Pro	Leu	Pro 300	Ser	Ala	Arg	Gly
45	Asp Pro	Glu	drb	Ser	Gly 310	Gly	Phe	Phe	Phe						
50	(2) INF	ORMA	TION	FOR	SEQ	ID I	NO: '	706:							
50		(i)		(A) L	ENGT	H: 1	06 а	mino		ರೆತ					
55		(xi)		(B) I (D) I (UENC	OPOL	OGY :	lin	ear	EQ I	D NO	: 70	6:			
	Met Ser 1	Gly	Gln	Gly 5	Leu	Ala	Gly	Phe	Phe 10	Ala	Ser	Val	Ala	Mes 15	Ile
60	Cys Ala	Ile	Ala	Ser	Gly	Ser	Glu	Leu	Ser	Glu	Ser	Ala	Phe	Gly	Tyr

	20 25 30
_	Phe Ile Thr Ala Cys Ala Val Ile Ile Leu Thr Ile Ile Cys Tyr Leu 35 40 45
5	Gly Leu Pro Arg Leu Glu Phe Tyr Arg Tyr Tyr Gln Gln Leu Lys Leu 50 60
10	Glu Gly Pro Gly Glu Gln Glu Thr Lys Leu Asp Leu Ile Ser Lys Gly 65 70 75 80
	Glu Glu Pro Arg Ala Gly Lys Glu Glu Ser Gly Val Ser Val Ser Asn 85 90 95
15	Ser Gln Pro Thr Asn Glu Ser His Ser Ile 100 105
20	(2) INFORMATION FOR SEQ ID NO: 707:
	(i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 81 amino acids (B) TYPE: amino acid
25	(D) TOPOLOGY: linear (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 707:
30	Ser Gly Val Ser Val Ser Asn Ser Gln Pro Thr Asn Glu Ser His Ser 1 15
50	Ile Lys Ala Ile Leu Lys Asn Ile Ser Val Leu Ala Phe Ser Val Cys 20 25 30
35	Phe Ile Phe Thr Ile Thr Ile Gly Met Phe Pro Ala Val Thr Val Glu 35 40 45
	Val Lys Ser Ser Ile Ala Gly Ser Ser Thr Trp Glu Arg Tyr Phe Ile 50 55 60
40	Pro Val Ser Cys Phe Leu Thr Phe Asn Ile Phe Asp Trp Leu Gly Arg 65 70 75 80
4 =	Ser ·
45	
	(2) INFORMATION FOR SEQ ID NO: 708:
50	(i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 92 amino acids (E) TYPE: amino acid
	(D) TOPOLOGY: linear (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 708:
5 5	Thr Ile Gly Met Phe Pro Ala Val Thr Val Glu Val Lys Ser Ser Ile
	Ala Gly Ser Ser Thr Trp Glu Arg Tyr Phe Ile Pro Val Ser Cys Phe
60	20 25 30

	Leu	Thr	Phe 35	Asn	Ile	Phe	Asp	Trp 40	Leu'	Gly	Arg	Ser	Leu 45	Thr	Ala	Val
5	Phe	Met 50	Trp	Pro	Gly	Lys	Asp 55	Ser	Arg	Trp	Leu	PT0 60	Ser	Trp	Kaa	Leu
10	Ala 65	Arg	Leu	Val	Phe	Val 70	Pro	Leu	Leu	Leu	Leu 75	Cys	Asn	Ile	Lys	Pro 80
	Arg	Arg	Tyr	Leu	Thr 85	Val	Val	Phe	Glu	His 90	Asp	Ala				
15	(2)	INF	OPMAT	rion	FOR	SEQ	ID 1	10: 7	709:							
20			(i) :	- (. (:	A) L B) T D) T	engt YPE : opol	H: 7 ami OGY:	4 am no a lin	ino cid ear	acid		: 709	·) :		٠	
25	Phe 1	Gly	Pro	Lys	Lys 5	Val	Lys	Pro	Ala	Glu 10	Ala	Glu	Thr	Ala	Glu 15	Pro
	Ser	Trp	Pro :	Ser 20	Ser	Cys	Val	Trp	Val 25	ŢŢ	His	Trp	Gly	Jeu 30	Phe	Ser
30 .	Pro	Ser	Cys 35	Ser	Gly	Gln	Leu	Cys 40	Asp	Lys	Gly	drı	Thr 45	Glu	Gly	Leu
35	Pro	Ala 50	Ser	Leu	Pro	Val	Cys 55	Leu	Leu	Pro	Гел	Pro 60	Ser	Ala	Arg	Gly
	Asp 65	Pro	Glu	TTP	Ser	Gly 70	Gly	Phe	Phe	Phe						
40	(2)	INF	ORMA:	rion	FOR	SEQ	ID 1	NO: 7	~ 710:							
45			(i) .	(A) L B) T D) T	ENGT YPE : OPOL	H: 1 ami OGY:	35 a no a lin	mino cid ear	aci		: 71(O :			
50 -	Asp 1	Asp	Asp	Gly	Phe 5	Glu	Ile	Val	Pro	Ile 10	Glu	Asp	Pro	Ala	Lys 15	His
	Arg	Ile	Leu	Asp 20	Pro	Glu	Gly	Leu	Ala 25	Leu	GJÀ	Ala	Val	Ile 30	Ala	Ser
55	Ser	Lys	Lys 135	Ala	Tàz	Arg	Asp	Leu 40	Ile	Asp	Asn	Ser	Phe 45	Asn	Arg	Tyr
60	Thr	Phe 50	Asn	Glu	Asp	Glu	Gly 55	Glu	Leu	Pro	Gĵπ	Trp 60	Phe	Val	Gln	Glu

	Glu 65	Lys	Gļņ	His	Arg	Ile 70	Arg	Gln	Leu	52.0	Val 75	Gly	Lys	ŗ ŗ	Glu	Val 80
5	Glu	His	Tyr	Arg	85 85	Arg	dīī	Arg	Glu	Ile 90	Asn	Ala	Arg	510	Ile 95	Xaa
	Xaa	Xaa	Хаа	Хаа 100	Kaa	Хаа	Хаа	Kaa	Хаа 105	Xaa	Xaa	Xaa	Xaa	Хаа 110	Kaa	Xaa
10	Leu	Glu	Gln 115	Thr	Arg	Lys	Lys	Ala 120	Glu	Ala	Val	Val	Asn 125	Thr	Val	qaA
15	Ile	Хаа 130	Arg	Thr	Arg	Glu	Ser 135	. .								
	(2)	INF	ORMA:	NOI	FOR	SEQ	ID 1	vo: 7	111:							
20				() ()	A) L B) T D) T	ENGT. YPE : OPOL	H: 5 ami CGY:	ERISTO AM NO	ino d cid ear	acid		: 71:	L:			
25	Asp 1	qzA	Asp	Gly	Phe 5	Glu	Ile	Val	Pro	Ile 10	Glu	Asp	Pro	Ala	Lys 15	His
30	Arg	Ile	Leu	Asp 20	Pro	Glu	Gly	Leu	Ala 25	Leu	Gly	Ala	Val	Ile 30	Ala	Ser
	Ser	Lys.	Lys 35	Ala	Lys	Arg	Asp	Leu 40	Ile	qzA	Asn	Ser	Phe- 45	Asn	Arg	Tyr
35	Thr	Phe 50											•			
40	(2)	INFO	ORMAT	NOI	FOR	SEQ	ID N	NO: 7	12:							
45				(. (.	A) L B) T D) T	engt YPE : OPOL	H: 5 ami: OGY:	EPIST 1 am no a 1in PTIO	ino d cid ear	acid	•	: 71	2:			
50	Lys 1	Arg	Trp	Arg	Glu 5	Ile	Asn	Ala	Arg	Pro 10	Ile	Xaa	Xaa	Xaa	Хаа 15	Xaa
	Xaa	Xaa	Хаа	Хаа 20	Xaa	Xaa	Xaa	Xaa	Хаа 25	Xaa	Xaa	Xaa	Leu	Glu 30	Gln	Thr
55	Arg	Lys	Lys 35	Ala	Glu	Ala	Val	Val 40	Asn	Thr	Val	Asp	Ile 45	Xaa	Arg	Thr
	Arg	Glu 50	Ser													

	(2)	TIME	Jeun.	TON	FUR	ಎಪಲ್ಲ	ו עו	wo: .	,15:							
5 "				(ENCE A) L B) T D) T UENC	engt YPE : Opol	H: 2 ami OGY:	l6 a no a lin	mino cid ear	aci		: 71	3 :	-		
10	Mes 1	Ile	Lys	qzA	Lys 5	Gly	Arg	Ala	Arg	Thr 10	Ala	Leu	Thr	Ser	Ser 15	Gln
15	Pro	Ala	His	Leu 20	Cys	Pro	Glu	Asn :	Pro 25	Leu	Leu	His	Leu	Lys 30	Ala	Ala
	Val	Lys	Glu 35	Lys	Lys	Arg	Asn	Lys 40	Lys	Lys	Lys	Thr	Ile 45	Gly	Ser	Pro
20	Lys		Ile	Gln	Ser	Pro	Leu 55	Asn	Asn	Lys	Leu	Leu 60	Asn	Ser	Pro	Ala
	Lys 65	Thr	Leu	Pro	Gly	Ala 70	Cys	Gly	Ser ,	Pro	Gln 75	ŗàs	Leu	Ile	Asp	80
25	Phe	Leu	Lys	His	Glu 85	Gly	Pro		Ala ,		Lys	Pro	Leu	Gĺu	Glu 95	Leu
30	Ser	Ala	Ser	Thr 100	Ser	Gly	Val	Pro	Gly 105	Leu	Ser	Ser	Leu	Gln 110	Ser	Asp
	Pro	Ala	Gly 115	Cys	Val	Arg	Pro	Pro 120	Ala	Pro	Asn		Ala 125	Gly	Ala	Val
35	Glu	Phe'	Asn	Asp	Val	Lys	Thr 135	Leu	Leu	Arg	Glu	Trp 140	.Ile	Thr	Thr	Ile
	Ser 145	Asp	Pro	Met	Glu	Glu 150	Aşp	Ile	Leu	Gln	Val 155	Val	Lys	īĀī	Cys	Thr 160
40	qzA	Leu	Ile	Glu	Glu 165	Lys	Asp	Leu	Glu	Lys 170	Leu	Asp	Leu	Val	Ile 175	Lys
45	Tyr	Met	Lys	Arg 180	Leu	Met	Gln	Gln	Ser 185	Val	Glu	Ser	Val	Trp 190	Asn	Met
	Ala	Phe	Asp 195	Phe	Ile	Leu	Asp	Asn 200	Val	Gln	Val	Val	Leu 205	Gln	Gln	Thr
50	Tyr	Gly 210	Ser	Thr	Leu	Lys	Val 215	Thr								

(2) INFORMATION FOR SEQ ID NO: 714:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 52 amino acids(B) TYPE: amino acid(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 714:

55

	Met l	Ile	Lys	Àsp	Lys 5	Gly	Arg	Ala	Arg	Thr 10	Ala	Leu	Thr	Ser	Ser 15	Gln	
5 -	Pro	Ala	His	Leu 20	Cys	Pro	Glu	Asn	Pro . 25	Leu	Leu	His	Leu	Lys 30	Ala	Ala	
0	Val	Lys	Glu 35	Lys	Lys	Arg	Asn	Lys 40		Lys	Lys	Thr	Ile 45	Gly	Ser	Pro -	
Ĭ	Lys	Arg 50	Ile	Gln				-)(-						•			
5	(2)	INF	ORMA	NOIT	FOR	SEQ	ו פו	; ; ;	715:								•
.0			(i) :	(A) L E) T D) T	ENGT YPE: OPOL	H: 1 ami OGY:	no a no a lin	mino cid ear	aci		: 71	5 :	•			
25	Lys 1	Arg	Ile	Gln	Ser 5	Pro	Leu	Asn	Asn	Lys 10	Leu	Leu	Asn	Ser	Pro 15	Ala	
	Lys	Thr	Leu	Pro 20	Gly	Ala	Cys	Gly	Ser 25	Pro	Gln	Ľуs	Leu	Ile 30	q24	Gly	-
0	Phe	Leu	Lys 35	His	Glu	Gly	Pro	Pro 40	Ala	Glu	Lys	920	Leu 45	Glu	Glu	Leu	
35	Ser	Ala 50	Ser	Thr	Ser	Gly	Val 55	Pro	Gly	Leu	Ser	Ser 60	Leu	Gln	Ser	Asp	
	Pro 65	Ala	Gly	Cys	Val	Arg 70	Pro	Pro	Ala	Pro	Asn 75	Leu	Ala	Gly	Ala	Val 80	
10	Gļu	Phe	Asn	Asp	Val 85	Lys	Thr	Leu	Leu	Arg 90	Glu	Trp	Ile	Thr	Thr 95	Ile	
	Ser	Asp	Pro	Mec 100													
15	(2)	INF	ORMA	マナ へんてつ	FOP	- SEA	τn	NKO -	716.								
50		-	(i)	UÇSZ))	ENCE (A) I (B) T (D) T	CHA ENGI : ETYPE : OPOL	FACT H: 7 ami : YDO.	TERIS /4 an ino a : lin	TICS mino mcid mear	acid): 71	6 :				
55	Thr 1		Ser	Asp	Pro 5		Glu	Glu	Asp	Ile 10		Gln	Val	Val	Lys 15		
50	Cys	Thr	qaA '	Leu 20		Glu	Glu	. Lys	Asp 25		Glu	Lys	Leu	Asp 30		Val	

(2) INFORMATION FOR SEQ ID NO: 720:

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Ile Lys Tyr Met Lys Arg Leu Met Gln Gln Ser Val Glu Ser Val Trp
      ' 35
                   40 45
    Asn Met Ala Phe Asp Phe Ile Leu Asp Asn Val Gln Val Val Leu Gln
5
      50 55 60
     Gln Thr Tyr Gly Ser Thr Leu Lys Val Thr
            . 70
10
    (2) INFORMATION FOR SEQ ID NO: 717:
           (i) SEQUENCE CHARACTERISTICS:
15
               (A) LENGTH: 18 amino acids
                 (B) TYPE: amino acid
                (D) TOPOLOGY: linear
           (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 717:
     Phe Cys His Asp Cys Lys Phe Pro Glu Ala Ser Pro Ala Met Asn Cys
                  5
                          10
    Glu Pro
25
     (2) INFORMATION FOR SEQ ID NO: 718:
30
          (i) SEQUENCE CHARACTERISTICS:
                 (A) LENGTH: 13 amino acids
                 (B) TYPE: amino acid
                 (D) TOPOLOGY: linear
           (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 718:
35
     Phe Cys His Asp Cys Lys Phe Pro Glu Ala Ser Pro Ala Met Asn Cys
                         10 . 15
            5
    Glu Pro
40
     (2) INFORMATION FOR SEQ ID NO: 719:
45
           (i) SEQUENCE CHARACTERISTICS:
                (A) LENGTH: 27 amino acids
                 (B) TYPE: amino acid
                 (D) TOPOLOGY: linear
50
           (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 719:
     Pro Gln Pro Ser Asn Phe Pro Thr Thr Val Arg Asn Leu Pro Tyr Ser
      1 5 10
55
     Gly Ala Gly Ala Gln Pro Pro Pro Ser Asn Cys
                20
                                25
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			(<u>i</u>) :	SEQUI .)		CHA! ENGT					ds					
_				€.	B) T	YPE:	ami	no a	cid							
5			(cei)	SEQI		OPOL				:O T	סוא כ	. 721	٦.			
			12/2/	250	ب الانتقال		د د د د د د				JINO	. /=	J .			
		Ala	Ser	Ser		Pro	Ala	Gly	Gly		Thr	Arg	Ala	Gly		Ile
10	1				5					10					15	
10	Phe	Leu	Ile	Gly	Lys	Leu	qzA	Leu	Glu	Ala	Ser	Leu	Phe	Lys	Ser	Phe
-				20					25					30		
•	Gla	لعدي	ĩ.eu	> ~0	Dha	Val	T.e.11	Arm	1.75	Lvs	Cvs	Asn	Dha	Ph∈	Cve	₩
15			35					. 40	- <u>-</u> -		-2-		45		-,-	
		C			•••		•	D	1	174 -	2	*	C		•	_
	qzĄ	Ser 50	Ser	ALA	His	Ser	55	PEO	reu	FILS	PIQ	50	ser	Ala	ser	CAR
•																
20		Ala	Pro	Ala	Cys	His	Ala	Ser	Asp	Thr	His	ren	Leu	Tyr	Pro	
	65				·	70					13					80
	Thr	Arg	Ala	Leu		Pro	Ser	Ile	Phe		Trp	Leu	Val	Ala		His
25					85					90					95	
	Ser	Val	Phe	Arg	Thr	Asn	Ala	Pro	Gjy	Pro	Thr	Pro	Ser	Ser	Gln	Ser
				100					105					110		
-	Ser	ב∼כ	Val	Phe	D-0	V=1	Dhe	Pro	Val	Ser	Phe	Mer	Δla	Leu	712	Val
30			115					120				16.1	125			
	~	,,,,	T	**- 1	O	~ ·-										
	Cys	130	ren	Val	CĀR	Cys							-	•		
25																
35				•												
•	(2)	INF	ORMA	NOIT	FOR	SEQ	ID 1	NO: 1	721:							
							<u>.</u> .							-		
40			(1)	SEQU)		CHA. ENGT					s					
						YPE:										
			/20i \			OPOL				=n T1	ר אינה	. 72	٠.			•
			(XI)	SEQ	V=1VC.	= UE	SCRL.	2110	N: 5.	≎ Q ⊥.	D NO	: 12.	1:			
45	Met	Ala	Ser	Ser	Val	Pro	Ala	Gly	Gly			Arg	Ala	Gly	Gly	Ile
	1				5					10					15	
	Phe	Leu	Ile	Gly	Lys	Leu	Asp	Leu	Glu	Ala	Ser	Leu	Phe	Lys	Ser	Phe
50				.20					25			•		30		
50	G1n	لنحل	T.en	₽∽o	Dhe	(/a/)	ĭ.en	Ara	ī.szs	7.578	Cvs	Asn	Phe	Phe	C) /S	T
	~	5	35	110	- 114	·	202	40		-2.5	0,0		45	- 110	Cys	יביב
		_	_			_	_				_	_	_			
55	Asp	Ser 50	Ser	Ala	His	Ser	Leu 55	bro	ŗeu	His	Pro	Leu 60	Ser	Ala	Ser	Cys
-		-0			:											
		Ala	Pro	Ala	Cys		Ala									
	65					70										

	(2)	TME	OLUMN.	LUN	FUR	೨೭೪	יי טיי	WO: /	24:							
5			(i) :	() ()	A) L B) T D) T	engt YPE : Opol	H: 4 ami OGY:	6 am no a lin	ino cid ear	acid		: 72:	2:			
10	Phe 1	Ala	Trp	Leu	Val 5	Ala	Pro	His	Ser	Val 10	Phe	Arg	Thr	Asn	Ala 15	Pro
15			Thr Phe	20			:	Val	25				Cys	30	Phe	Pro
20	(2)	INF	35 ORMA	rion	FOR	SEQ	I DI	40 30: 7	723:				45			
25	,		(i) :	((A) L B) T D) T	ENGT YPE: OPOL	H: 1 ami OGY:	34 a no a lin	mino cid ear	aci		: 72:				
30	Met 1	Ala	Ser	Ser	Val 5	Pro	Ala	СĵУ	Gly	His 10	Thr	Arg	Ala	Gly	Gly 15	Ile
	Phe	Leu	Ile	Gly 20	Lys	Leu	Asp	Leu	Glu 25	Ala	Ser	Leu	Phe	Lys 30	Ser	Phe
35	Gln	Trp	Leu 35	Pro	Phe	Val	Leu	Arg 40	Lys	Lys	Cys	Asn	Phe 45	Phe	Cys	Trp
40	Asp	Ser 50	Ser	Ala	His	Ser	Leu 55	Pro	Leu	His	Pro	Leu -60	Ser	Ala	Ser	Cys
,	Ser 65		Pro	Ala	Cys	His 70		Ser	Asp	Thr	His 75	Leu	Leu	Tyr	Pro	Ser 80
45	Thr	Arg	Ala	Leu	Cys 85	Pro	Ser	Ile	Phe	Ala 90	Trp	Leu	Val	Ala	Pro 95	His
	Ser	Val	Phe	Arg 100	Thr	Asn	Ala	Pró	Gly 105	Pro	Thr	Pro	Ser	Ser 110	Gln	Ser
50	Ser)PTO	Val 115	Phe	Pro	Val	Phe	Pro 120	Val	Ser	Phe	Met	Ala 125	Leu	Ile	Val
55	Cňa	Хаа 130	Leu	Val	Cys	Cys		•								

(2) INFORMATION FOR SEQ ID NO: 724:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 236 amino acids (B) TYPE: amino acid (D) TOPOLOGY: linear (Xi) SEQUENCE DESCRIPTION: SEQ ID NO: 724:																
5														•		
	Met 1	Ala	Met	Glu	Gly 5	īàī	TIP	Arg	Phe	Leu 10	Ala	rsn	Leu	Gly	Ser 15	Ala
10	Leu	Leu	Val	Gly 20	Phe	Leu	Ser	Val	Ile 25	Phe	Ala	Leu	Val	Trp 30	Val	Le
	His	Tyr	Arg 35	Glu	Gly	Leu	Gly	Trp 40	Asp	Gly	Ser	Ala	Leu 45	Glu	Phe	Asr
15	Trp	His 50	Pro	Val	Leu	Met	Val 55	Thr	Gly	Phe	Val	Phe 60	Ile	Gln	Gly	Ile
20	Ala 65	Ile	Ile	Val	Тут	Arg 70	Leu	Pro	בֹּצת	Thr	Trp 75	Lys	Cys	Ser	Lys	Let 80
	Leu	Met	Lys	Ser	Ile 85	His	Ala	Gly	Leu	Asn 90	Ala	Val	Ala	Ala	Ile 95	Let
25	Ala	Ile	Ile	Ser 100	Val	Val	Ala	Val	Phe 105	Glu	Asn	His	Asn	Val 110	Asn	Asr
	Ile	Ala	Asn 115	Met	Tyr	Ser	Leu	His 120	Ser	Ţzp	Val	Gly	Leu 125	Ile	Ala	Va]
30	Ile	Cys 130	Tyr	Leu	Leu	Gln	Leu 135	Leu	Ser	Gly	Phe	Ser 140	Val	Phe	Leu	Let
35	Pro 145	Trp	Ala	Pro	Leu	Ser 150	Leu	Arg	Ala	Phe	Leu 155	Mec	Pro	, Ile	His	Va]
	Tyr	Ser	Gly	Ile	Val 165		Phe	Gly	Thr	Val 170	Ile	Ala	Thr	Ala	Leu 175	Met
40	Gly	Leu	Thr	Glu 180	Lys	Leu	Ile	Phe	Ser 185	Leu	Arg	Asp	Pro	Ala 190	Tyr	Sei
٠	Thr	Phe	Pro 195	Pro	Glu	Gly	Val	Phe 200	Val	Asn	Thr	Leu	Gly 205	Leu	Leu	Ile
45	Leu	Val 210	Phe	Gly	Ala	Leu	Ile 215	Phe	Trp	Ile	Val	Thr 220	Arg	Pro	Gln	Tr
50	Lys 225	Arg	Pro	Lys	Glu	Pro 230	Asn	Ser	Thr	Ile	Leu 235	His	Pro	Asn	Gly.	Gl ₂ 24(
	Thr	Glu	Gln	Gly	Ala 245	Arg	Gly	Ser	Mec	Pro 250	Ala	Tyr	Ser	Gly	Asn 255	Ası
55	Met	Asp	Lys	Ser 260		Ser	Glu	Leu	Asn 265	Ser	Glu	Val	Ala	Ala 270	Arg	Lys
	Arg	Asn	Leu 275		Leu	qzA	Glu	Ala 280	Gly	Gln	Arg	Ser	Thr 285	Met		

	(2)	INF	ORMA:	rion	FOR	SEQ	ID I	NO: 1	725 :							
5				(A) L B) T D) T	engt YPE : OPOL	H: 4 ami OGY:	3 am no a lin	ino cid ear	acid		: 729	<u>-</u>);			
10	Pro 1	Gly	Arg	Ala	Gly 5	Pro	Ser	Pro	Gly	Leu 10	Ser	Leu	Gln	Leu	Pro 15	Ala
15	Glu	Pro	Gly	His 20	Pro	Ala	Gly	Asn :	Leu 25	Ala	Pro	Leu	Thr	Ser 30	Arg	Pro
	Gln ·	Pro	Leu 35	Cys	Arg	Ile	Pro	Ala 40	Val	Pro	Gly					
20_	(2)	INF	OPMA:	rion	FOR	SEQ	ID 1	No: 7	725:		•					
25				(.	A) L B) T D) T	engt YPE : OPOL	H: 4 ami OGY:	24 a no a lin	mino cid ear	aci		: 72	5 :			
30	Met 1	Lys	Leu	Leu	Gly 5	Glu	Cys	Ser	Ser	Ser 10	Ile	Asp	Ser	Val	Lys 15	Arg
-	Leu	Glu	His	Lys 20	Leu	Lys	Glu	Glu	Glu 25	Glu	Ser	Leu	Pro	30 30	Phe	Val
35	Asn	Leu	His 35	Ser	Thr	Glu	Thr	Gln 40	Thr	Ala	Gly	Val	Ile 45	Asp	Arg	Trp
40	Glu	Leu 50	Leu	Gln	Ala	Gln	Ala 55	Leu	Ser	Lys	Glu	Leu 60	Arg	Met	ГЛЗ	Gln
	Asn 65	Leu	Gln	Lys	TIP	Gln 70	Gln	Phe	Asn	Ser	A.sp 75	Leu	Asn	Ser	Ile	80 qrT
45				Gly	85					90					95	
- 0				Thr 100		-	•		105		-			110		
50	Lys	Glu	Leu 115	Gln	ГĀЗ	Ala	Val	Asp 120	His	Arg	Lys	Ala	Ile 125	Ile	Leu	Ser
55		130		CÀ2	./		135					140				٠.
	145			Gln		150					155					160
60	Val	Cys	Ser	Leu	Leu 165	Glu	Glu	TIP	Arg	Gly 170	Leu	Lau	Gln	Asp	Ala 175	Leu

	Met	Gln	Cys	Gln 130	Gly	Phe	His	Glu	Met 135	Ser	His	Gly	Leu	Leu 190	Leu	Met
5	Leu	Glu	Asn 195	Ile	Asp	Arg	Arg	Lys 200	Asn	Glu	Ile	Val	Pro 205	Ile	qzA	Ser
	Asn	Leu 210	qzA	Ala	Glu	Ile	Leu 215	Gln	Asp	His	His	Lys 220	Gln	Leu	Mec	Gln
.0	Ile 225	Lys	His	Glu	Leu	Lau 230	Glu	Ser	Gln	Leu	Arg 235	Val	Ala	Ser	Leu	Gln 240
15	Asp	Met	Ser	Cys	Gln 245	Leu	Leu	Val :	Asn	Ala 250	Glu	Gly	Thr	qaA	Cys 255	Leu
	Glu	Ala	Lys	Glu 260	Lys	Val	His	Val	Ile 265	Gly	Asn	Arg	Leu	Lys 270	Leu	Leu
20	Leu	Lys	Glu 275	Val	Ser	Arg	His	Ile 230	Lýs	Glu	Leu	Glu	Lys 285	Leu	Leu	Asp
25	Val	Ser 290	Ser	Ser	Gln	Gln	Asp 295	Leu	Ser	Ser	Trp	Ser .300	Ser	Ala	Asp	Glu
دے	Leu 305	Asp	Thr	Ser	Gly	Ser 310	Val	Ser	Pro	Xaa	Ser 315	Gly	Arg	Ser	Thr	Pro 320
30	Asn	Arg	Gln	Lys	Thr 325		Arg	Gly	Lys	Cys 330		Leu	Ser	Gln	Pro 335	Gly
	Pro	Ser	Val	Ser 340		Pro	His	Ser	Arg 345		Thr	Lys	Gly	350	Ser	qzA
35	Ser	Ser	Leu 355		Glu	Pro	Xaa	Pro 360		· Arg	Ser	Gly	Arg 365		Phe	Leu
40	Phe	Arg 370		. Leu	Arg	Ala	Ala 375		Pro	Leu	Gln	380		Leu	Leu	Leu
	Leu 385		Gly	· Leu	ı Ala	Cys 390		. Val	. Pro	Met	Ser 395		Glu	gzA :	Tyr	Ser 400
45	CĀR	: Ala	. Leu	ı Ser	405		Phe	Ala	. Arg	1 Ser 410		His	: Pro	Met	. Lėu 415	Arg
	TΥΥ	Thr	AST	1 Gly 420		Pro) Pro	Leu	1			٠			•	
50	(2)				. 50			NG.	727.							
	(2)) INE			UENC	E CH	O ID ARAC	reri:	STIC	S:						
55					(B)-	TYPE	TH: : am LOGY	ino : li	acid near				2.7			
									- N.	~=~	TTO AT		, , ,			

Met Lys Leu Leu Gly Glu Cys Ser Ser Ser Ile Asp Ser Val Lys Arg

	1				5					10					15	
5	Leu	Glu	His	Lys 20	Leu	Lys	Glu	Glu	Glu 25	Glu	Ser	Leu	Pro	Gly 30	Phe	Val
	Asn	Leu	His 35	Ser	Thr	Glu	Thr	Gln 40	Thr	Ala	Gly ·	Val	Ile 45	Asp	Arg	Trp
10	Glu	Leu 50	Leu	Gln	Ala	Gln	Ala 55	Leu	Ser 	Lys	Glú	Leu 60	Arg	Met	Lys	Gln
,	Asn 65	Leu.	Gln	ŗàz	Trp	Gln 70	Gln	Phe	Asn	Ser	Asp 75	Leu	Asn	Ser	Ile	تت 03
15	Ala	4zb	Leu	Gly	Asp 85	Thr	Glu	Glu	Glu	Leu 90	Glu	Gln	Leu	Gln	Arg 95	Leu
20	Glu	Leu	Ser	Thr 100	Asp	Ile	Gln	Thr	Ile 105	Glu	Leu	Gln	Ile	Lys 110		
	(2)	INFO	ORMAI	rion	FOR	SEQ	ID 1	vo: 7	728:							
25				(.	A) L B) T D) T	ENGT YPE: OPOL	H: 1 ami OGY:	36 a no a lin	mino cid ear	aci		. 72	2			
30	T			SEQ											_,	
	1				. 5					10				Ala	15	
35	Leu	Ser	Ile	Asn 20	Leu	Cys	Ser	Pro	Glu 25	Phe	Thr	Gln	Ala	Asp 30	Ser	Lys
	Glu	Ser	Arg 35	Asp	Leu	Gln	Asp	Arg 40	Leu	Xaa	Gln	Met	Asn 45	Gly	Arg	Trp
10	qzA	Arg 50	Val	cys -	Ser	Leu	Leu 55	Glu	Glu	Trṗ	Arg	Gly 50	Leu	Leu	Gln	Asp
15	Ala 65	Leu	Met	Gln	Cys	Gln 70	GļĀ	Phe	His	Glu	Met 75	Ser	His	Gly	Leu	Leu 80
	Leu	Met	Геп	Glu	Asn 85	Ile	Asp	Arg	Arg.	Lys 90	Asn	Glu	Ile	Val	P±0 95	Ile
50	Asp	Ser	Asn	Leu 100	Asp	Ala	Glu	Ile	Leu 105	Gln	Asp	His	His	Lys 110	Gln	Leu
	Met	Gln	Ile 115	Lys	His	Glu	Leu	Leu 120	Gļū	Ser	Gln	Leu	Arg 125	Val	Ala	Ser
55	Leu	Gln 130	Asp	Met.	Ser	Cys	Gln 135	Leu							•	

5	٠			C	A) L E) T D) T	engt: YPE : OPOL	H: 1 ami CGY:	05 a no a lin	mino cid ear	aci		. 77	a .			
	Gln 1			Ser										Thr	Asp 15	Cys
.0	Leu	Glu	Ala	Lys 20	Glu	Lys	Val	His	Val 25	Ile	Gly	Asn	Arg	Leu 30	Lys	Leu
.5	Leu	Leu	Lys 35	Glu	Val	Ser	Arg	His .40	Ile	Lys	Glu	Leu	Glu 45	Lys	Leu	Leu
	Asp	Val 50	Ser	Ser	Ser	Gln	Gln 55	Asp	Leu	Ser	Ser	Trp 60	Ser	Ser	Ala	Asp
20	Glu 65	Leu	Asp	Thr	Ser	Gly 70	Ser	Val	Ser	Pro	Xaa 75	Ser	GŢÀ	Arg	Ser	Thr 80
25	Pro	Asn	Arg	Gln	Lys 85	Thr	Pro	Arg	Gly	Lys 90	Cys 	Ser	Leu	Ser	Gln 95	Pro
	Gly	Pro	Ser	Val 100	Ser	Ser	Pro	His	Ser 105							
30	(2)	INF	OP <u>MA</u>	TION	FOR	, SEQ	ID N	vo: :	730:							
35				΄ (A) L B) T D) T	ENGT YPE : OPOL	H: 7 ami OGY:	3 am no a lin	ino cid ear	acid		: 73	0:	•		
10	Asp 1	Şer	Ser	Leu	Ser 5	Glu	Pro	Xaa	Pro	Gly 10	Arg	Ser	Gly	Arg	Gly 15	Phe
	Leu	Phe	Arg	Val 20	Leu	Arg	Äla	Ala	Leu 25	Pro	Leu	Gln	Leu	Leu 30	Leu	Leu
1 5	Leu	Leu	Ile 35	GJλ	Leu	Ala	Cys	Leu 40	Val	Pro	Met	Ser	Glu .45	Glu	Asp	Tyr ,
50	Ser	Cys 50	Ala	Leu	Ser	Asn	Asn 55	Phe	Ala	Arg	Ser	Phe 60	His	Pro	Met	Leu
	Arg 65	Tyr	Thr	Asn	GJĀ	Pro 70	Pro	Pro	Leu							
55	(2)	INF	ORMA'	TION.	FOR	SEQ	ID 1	NO: 1	731:			•				
			(i)	SEQU.					TICS ino		s					

(B) TYPE: amino acid

PCT/US98/11422

			(xi)					lin PTIO		EQ I	ON C	: 73	1:			
5	Met 1	Lys	Leu -	Leu	īle 5	Cys	Gly	Asn	Tyr	Leu 10	Ala	Pro	Ser	His	Ser 15	Glu
	Ser	Ser	Arg	Arg 20	Cys :	Cys	Геп	Leu	Cys 25	Phe	Tyr	520	Leu	Cys 30	Leu	Glu
10	Ile	Asn	Phe 35	Gly	Mec	Lys	Val	Phe 40	Leu	Ser	Mec	Pro	Phe 45	Leu	Val	Leu
15	Phe	Gln 50	Ser	Leu	Ile	Gln	Glu 55	Asp :						٠		
	(2)	INF	ORMA:	NOI	FOR	SEQ	IĎ I	10: 7	732:	,						
20			(i)	-				ERIS 71 a			ds				•	
				(D) T	OPOL	CGY:	no a lin	ear			72				
25	Arg			_				PTIO Ser						Lvs	Tv e	Asp
	ī.				~5					10					15	
30	Tyr	Leu	Pro	Thr 20	Thr	Val	Asn	Val	Cys 25	Ser.	Glu	Leu	Val	, 30 Tàs	Leu	Val
	Phe	Cys	Val 35	Leu	Val	Ser	Phe	Cys 40	Val	Ile	Lys	Lys	Asp 45	His	Gln	Ser ,
35	Arg	Asn 50	Leu	Lys	Tyr	Ala	Ser 55	Trp	Lys	Glu	Phe	Ser 60	Ysp	Phe	Met	Lys
40	Trp 65	Ser	Ile	Pro	Ala	Phe 70	Leu	Tyr	Phe	Leu	Asp 75	Asn	Leu	Ile	Val	Phe 80
	īĀī	Val	Leu	Ser	Tyr 85	Leu	Gln	Bro	Ala	Met 90	Ala	Val	.Ile	Phe	Ser 95	Asn
45	Phe	Ser	Ile	Ile 100	Thr	Thr	Ala	Leu-	Leu 105	Phe	Arg	Île	Val	Leu 110	ГÀг	Хаа
	Arg	Leu	Asn 115	Trp	Ile	Gln	Trp	Ala 120	Ser	Leu	Leu	Thr	Leu 125	Phe	Leu	Ser
50	Ile	Val 130	Ala	Leu	Thr	Ala	Gly 135	Thr	Lys	Thr	Leu	Gln 140	His	Asn	Leu	Ala
55	Gly 145	Arg	Gly	Phe	His	His 150	qzA	Ala	Phe	Phe	Ser 155	Pro	Ser	Asn	Ser	Суs 160
	Leu	Leu	Phe	Arg	Asn 165	Glu	Cvs	Pro	Arg	Lys 170	qzA	Asn	Çvs	Thr	Ala 175	Lys

Glu Trp Thr Phe Pro Glu Ala Lys Trp Asn Thr Thr Ala Arg Val Phe 180 185 190

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•																			
•																			
	Ser	His	Ile 195	Arg	Leu	Gly	Mec	Gly 200	His	Val	Leu	Ile	Ile 205	Val	Gln	Cys			
5	Phe	Ile 210	Ser	Ser	Met	Aļa	Asn 215	Ile	Tyr	Asn	Glu	Lys 220	Ile	Leu	Lys	Glu			
10	Gly 225		Gln	Leu	Thr	Glu 230	Хаа	Ile	Phe	Ile	Gln 235	Asn	Ser	Lys	Leu	Tyr 240			
10	Phe	Phe	Gly ·	Ile	Leu 245		Asn	Gly	Leu	Thr 250	Leu	Gly	Leu	Gln	Arg 255	Ser			
15	Asn	Arg	qzA.	Gln 260	Ile	Lys	Asn	Cys :	Gly 265	Phe	Phe	Tyr	Gly	His 270	Ser				
	-																		
20	(2)	INFO	ORMAC	rion	FOR	SEQ	ID N	NO: ĭ	733:										
20			(i) :		A) L	ENGT		4 am	ino	: aċid	S		-						
25		•	(xi)) SEQI			OGY: SCFI:			EQ II	D NO	: 73	3 :						
	Asn 1	Ser	Val	Pro	Asn 5	Leu	Gln	Thr	ŗ :	Ala 10	Val	Leu	Thr	Glu	Ala 15	Ilė			
30	Gly	Pro	Glu	Pro 20	Ala	Ile	Pro	Arg	Xaa 25	Pro	Arg	Glu	Pro	Pro 30	Val	Ala			
35	Thr	Ser	Thr 35	Pro	Ala	Thr	Pro	Ser 40	Ala	Gly	Pro	Gln	Pro 45	Leu	Pro	Thr			
<i>J J</i>	Gly	Thr 50	Val	Leu	Vạl	Pro	Gly Ş5	Gly	Pro	Ala	Pro	Pro 60	Cys	Leu	Gly _.	Glu			
40	Ala 65	Trp	Ala	Leu	Leu	Leu 70	Pro	Pro	Cys	Arg	Pro 75	Ser	Leu	Thr	Ser	80			
	Phe	Trp	Ser	Pro	Arg 85	Pro	Ser	Pro	ŢŢ	Lys 90	Glu	Thr	Gly	Val					
45										*									
	(2)	INFO	ORMAC	TION	FOR	SEQ	ID 1	vo: 7	734:										
50				(A) L B) T D) T	ENGT YPE: OPOL	H: 4 ami OGY:	0 am no a lin	ino cid ear	acid		: 73	4:				:	د ا د ا د ا	
55	Ala 1			Leu										Trp	Leu 15	Glu			

Glu Asn Val His Pro Ser Leu Gln Arg Leu Gln Xaa Leu Leu Gln Asp 20 25 30

Leu Ser Glu Val Ser Ala Pro Pro 35 40

35 .

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(2) INFORMATION FOR SEQ ID NO: 735: (i) SEQUENCE CHAPACTERISTICS: (A) LENGTH: 30 amino acids 10 (B) TYPE: amino acid (D) TOPOLOGY: linear (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 735: Cys His Pro Pro Ala Leu Ala Gly Thr Leu Leu Arg Thr Pro Gla Gly 15 5 10 Arg Ala His Ala Arg Gly Leu Leu Glu Ala Gly Gly Ala 25 20 20 (2) INFORMATION FOR SEQ ID NO: 736: (i) SEQUENCE CHARACTERISTICS: 25 (A) LENGTH: 59 amino acids (B) TYPE: amino acid (D) TOPOLOGY: linear (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 736: Gly Ser Ser Ser Thr Arg Ser Trp Phe Ser Thr Ser Ser Pro Gln Arg 1 5 10 , 15 Ser Ala Ser Trp His Ser Gly Ala Pro Ser Cys Arg Ser Trp Arg Leu 35 Pro Cys Ser Trp Leu Ser Thr Arg Met Pro Trp Arg Ser Gly Trp Arg 35. 40 . 45 Lys Thr Cys Thr Pro Ala Cys Ser Gly Cys Lys 40 (2) INFORMATION FOR SEQ ID NO: 737: 45 (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 247 amino acids (B) TYPE: amino acid (D) TOPOLOGY: linear 50 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 737: Met Arg Pro Asp Trp Lys Ala Gly Ala Gly Pro Gly Gly Pro Pro Gln Lys Pro Ala Pro Ser Ser Gln Arg Lys Pro Pro Ala Arg Pro Ser Ala 20 25 Ala Ala Ala Ile Ala Val Ala Ala Ala Glu Glu Glu Arg Arg Leu

	Arg	Gln 50	Arg	Asn	Arg	Leu	Arg 55	Leu	Glu	Glu	Asp	Lys 60	Pro	Ala	Val	Glu
5	Arg 65		Leu	Glu	Glu	Leu 70	Val	Phe	GŢĀ	qzA	Val 75	Glu	Asn	Asp	Glu	qzA 08
	Ala	Leu	Гéп	Arg	Arg 85	Leu	Arg	Gly	Pro	Arg 90	Val	.Gln	Glu	His	Glu 95	qzA
10	Ser	Gly	Asp	Ser 100	Glu	Val	Glu	Asn	Glu 105	Ala	Lys	Gly	Asn	Phe	PTO	Pro
15	Gln	Ļys	Lys 115	Pro	Val	Trp	Val	Asp 120	Glu	Glu	Asp	Glu	Asp 125	Glu	Glu	Met
10	Val	Asp 130	Met	Met	Asn'	Asn	Arg 135	Phe	Arg	rà2	Asp	Met 140		Lys	Asn	Ala
20	Ser 145	Glu	Ser	Ļys	Leu	Ser 150	Lys	Asp	Asn	Leu	Lys 155	Lys	Arg	Leu	Lys	Glu 160
	Glu	Phe	Gln	His	Ala 165	Met	Gly	Gly	Val	Pro 170	Ala	Trp	Ala	Gļu	Thr 175	Thr
25	Lys	Arg	Lys	Thr 180	Ser	Ser	Asp	Asp	Glu 1 <u>,</u> 85	Ser	Glu	Glu	Asp	Glu 190	Asp	Asp
30	Leu	Leu	Gln 195	Arg	Thr	Gly	Asn	Phe 200	Ile	Ser	Thr	Ser	Thr 205	Ser	Leu	Pro
	Arg	Gly 210	Ile	Leu	.Lys		Lys 215	Asn	Cys	Gln	His	Ala 220	Asn	Ala '.	Glu	Arg
35	Pro 225	Thr	Val	Ala	Arg	Ile 230	Ser	Ile	Cys	Ala ,	Val 235	Pro	Ser	Arg	Cys	Thr 240
	qzA	Cys	Asp		Cys 245	Trp	Asp									
40																
	(2)	INFO	ORMAT	NOIT	FOR	SEQ	ID 1	vo: 7	738:							
45			(i) :	(. (: (:	A) L B) T D) T	engt: YPE : OPOL	H: 1 ami: OGY:	ERIS: 80 a no a lin PTIO	mino cid ear	aci		:. 73	2 :			
50	Cys							Gly						Glu	asa.	جاد
	1				5					10					15	
55	Leu	Leu	Arg	Arg 20	Leu	Arg	Gly	Pro	Arg 25	Val	Gln	Glu	His	30	qzA	Ser
	Gly	Asp	Ser 35	Glu	'Val	Glu	Asn	Glu 40	Ala	Lys_	Gly	.Asn	Phe 45	Pro	Pro	Gln
60	Lys	Lys 50	Pro	Val	Trp	Val	qzA 55	Glu	Glu	qaA	Glu	Asp 60	Glu	Glu	Mec	Val

-	65					70		3	•		75					80
5	Glu	Ser	Lys	Leu	Ser 85	Lys	Asp	Asn	Leu	Lys 90	Lys	Arg	Leu	Lys	Glu 95	Glu
10	Phe	Gln	His	Ala 100		Gly	Gly	Val	Pro 105	Ala	Trp	Ala	Glu	Thr 110	Thr	ŗ'ns
••	Arg	Lys	Thr 115	Ser	Ser	Asp	Asp	Glu 120	Ser	Glu	Glu	Asp	Glu 125	qaA	Asp	Leu
i <i>5</i>	Leu	Gln 130	Arg	Thr	Glv	Asn	Phe 135	Tla	Ser	Thr	Ser	Thr 140	Şēı	Leu	Pro	Arg
	Gly 145	Ile	Leu	Lys	Met	Lys 150	Asn	Cys	Gln	His	Ala 155	Asn	Ala	Glu	Arg	Pro 160
20	Thr	Val	Ala	Arg	Ile 165	Ser	Ile	Cys	Ala	Val 170	Pro	Ser	Arg	Cys	Thr 175	Asp
25	Cys	Asp	GJÀ	Cys 180									•			
_•	(2)	TME	ORMAI	TOM	EUB.	\$50	70.1	JO - 7	;							
30	(2)		(i) :	SEQU.	ENCE	CHAI	RACT		rics		đs					
				(B) T	YPE:	ami	no a	cid							
			(xi)					lin PTIO		EO I	D NO	. 739	9:			
35	Leu 1		(xi) Glu	SEQ	UENC	E DE:	SCRI	PTIO	N: S				•	Asp	Gly 15	Ser
35 40	1	Lys		SZQ Lys	UENC Ile 5	E DE: Val	SCPI Arg Ile	PTION Ser	N: S	Glu 10	Val	Ser	Pro		15	
	1 Phe	Lys Leu	Glu	SEQUENT LYS	Ile 5 Asn	E DE: Val Gly	SCRI Arg Ile	PTION Ser Ala	Phe Gly 25	Glu 10 Tyr	Val Leu	Ser His	Pro Leu Gly	Leu 30	15 Ala	Met
	Phe Lys	Lys Leu Thr	Glu Leu Lys 35	SEQUE Lys Ile 20 Glu	Ile 5 Asn Leu	Val Gly	Arg Ile Gly	PTION Ser Ala Ser 40	Phe Gly 25 Met	Glu 10 Tyr Lys	Val Leu Ile	Ser His Asn	Pro Leu Gly 45	Leu 30 Arg	15 Ala Val	Met
40	Phe Lys	Lys Leu Thr Ser 50	Glu Leu Lys 35	Lys Lle 20 Glu Phe	Ile 5 Asn Leu Ser	Val Gly Ile	Arg Ile Gly Asp	Ser Ala Ser 40 Ser	Phe Gly 25 Met Lys	Glu 10 Tyr Lys	Val Leu Ile Val	Ser His Asn Tyr 60	Pro Leu Gly 45 Ala	Leu 30 Arg 	15 Ala Val	Met Ala Gly
40	Phe Lys Ala Asp 65	Leu Thr Ser 50	Glu Leu Lys 35	SEQU Lys Ile 20 Glu Phe	Ile 5 Asn Leu Ser	E DE: Val Gly Ile Ser Val	Arg Ile Gly Asp 55	Ser Ala Ser 40 Ser	N: S Phe Gly 25 Met Lys	Glu 10 Tyr Lys Lys	Val Leu Ile Val Ser 75	Ser His Asn Tyr 60 Arg	Pro Leu Gly 45 Ala	Leu 30 Arg Ser Cys	15 Ala Val Ser Leu	Met Ala Gly Asn 80
40	Phe Lys Ala Asp 65 Arg	Lys Leu Thr Ser 50 Gly	Leu Lys 35 Thr	SEQU Lys Ile 20 Glu Phe Val	UENC: Ile 5 Asn Leu Ser Tyr Glu 85	E DE: Val Gly Ile Ser Val 70	Arg Ile Gly Asp 55 Trp	PTION Ser Ala Ser 40 Ser Asp	N: S Phe Gly 25 Met Lys Val	Glu 10 Tyz Lys Lys Asn Gly 90	Val Leu Ile Val Ser 75	Ser His Asn Tyr 60 Arg	Pro Leu Gly 45 Ala Lys	Leu 30 Arg Ser Cys	15 Ala Val Ser Leu Thr 95	Met Ala Gly Asn 80 Ser
40 45 50	Phe Lys Ala Asp 65 Arg	Lys Leu Thr Ser 50 Gly Phe Asn	Glu Leu Lys 35 Thr	Lys Lys Lys Clu Phe Val Asp Gln 100	UENC: Ile 5 Asn Leu Ser Tyr Glu 85	Val Gly Ile Ser Val 70 Gly Val	Arg Ile Gly Asp 55 Trp Ser	Ser Ala Ser 40 Ser Leu Cys	N: S Phe Gly 25 Met Lys Val Tyr Gly 105	Glu 10 Tyr Lys Lys Asn Gly 90 Ser	Val Leu Ile Val Ser 75 Leu Asn	Ser His Asn Tyr 60 Arg Ser	Pro Leu Gly 45 Ala Lys Ile Gly	Leu 30 Arg Ser Cys Ala Val	15 Ala Val Ser Leu Thr 95	Met Ala Gly Asn 80 Ser

		130					135				,	140				
5	Pro 145	Thr	Thr	Glu	Ile	Leu 150	Ala	Ile	Ala	Ser	Glu 155	Lys	Met	Lys	Glu	Ala 160
J	Val	Arg ,	Leu	Val	His 165	Leu	Pro	Ser	Cys	Thr 170	Val	Phe	Ser	Asn	Phe 175	Pro
10	Val	Ile	Lys		Lys	Asn	Ile		His 185	Val	His	Thr	Mec	Asp 190	Phe	Ser
	Pro	Arg	Ser 195	Gly	Tyr	Phe	Ala	Leu 200	Gly	Asn	Glu	Lys	Gly 205	Lys	Ala	Leu
15	Met	Tyr 210	Arg	Leu	His	His	Tyr 215	Ser	Asp	Phe				,	•	•
20	(2)	INF	ORMAI	rion	FOR	SEQ	ID 1	10: T	740:							
25			•	(A) L B) T D) T	ENGT YPE: OPOL	ami OGY:	67 a no a lin	mino cid ear	: aci EQ I		: 74	0:			
30	Lys 1	Ile	Asn	Gly	Arg 5	Val	Ala	Ala	Ser	Thr · 10	Phe	Ser	Seŗ	Asp	Ser 15	Lys
50	Lys	Val	Tyr	Ala 20	Ser	Ser	Gly	Asp	Gly 25		vai	Tyr	Val	Trp . 30	Asp	Val
35	Asn	Ser	Arg 35	Lys	Cvs	Leu	Asn `	Arg 40	Phe	Val	Asp	Glu	Gly 45	Ser	Leu	Tyr
	Gly	Leu 50		Ile	Ala	Thr	Sęr 55	Arg	Asn	Gly	Gln	Tyr 60	Val	Ala	Cys	Gly
40	Ser 65		Cà2	Gly	Val	Val 70		Ile	TYI	Asn	Gln 75	Asp	Ser	Cys	Leu	Gln 80
45	Glu	Thr	Asn	Pro	Lys 85	Pro	Ile	Lys	Ala	Ile 90		Asn	Leu	Val	Thr 95	Gly
7,3	Val	Thr	Ser	Leu 100		Phe	Asn	Pro	Thr 105		Glu	Ile		Ala 110		Ala
50	Ser	· Glu	Lys 115		Lys	Glu	Ala	Val 120		Leu	. Val	His	Leu 125		Ser	Cys
	Thr	Val		Ser	Asn	Phe	Pro 135		Ila	: Lys	Asn	Lys 140		lle	Ser	His
55	Val		ילד:	Met	. Asp	Phe 150		Pro	Arg	Ser	Gly		Phe	: Ala	. Leu	160
60	Asr	ı Glu	Lys	: Gly	Lys 165		. Leu									

	(2)	TIME	JPIMAI.	I:TOM	FOR	SEQ	י עי	WO: .	41:							
5			(<u>i</u>)	(A) L B) T	ype:	H: 2 ami	46 a no a	mino cid		ĊS					
10			(xi)) SEQI	D) T UÉNC					EQ II	D NO	: 74	1:			
	Mec 1	Arg	Ile	Leu	Gln 5		Ile	Leu	Leu	Ala 10	Leu	Ala	Thr	Gly	Leu 15	Val
15	сīĀ	<u>G1</u> y	Clu	20	Arg	Ile	Ile,	īys	Gly 25	Pne	СТл	Суs	Lys	Leu 30	His	Ser
	Gln	Pro	Trp 35	Gln	Ala	Ala		Phe 40		Lys	Thr	Arg	Leu 45	Leu	Cys	Gly
20	Ala	Thr 50	Leu	Ile	Ala	220	Arg 55	Trp	Leu	Leu	Thr	Ala 60	Ala	His	Cys	Leu
25	Lys 65	Pro	Arg	Tyr	Ile	Val 70	His	Leu	GJĀ	Gln	His 75	Asn	Leu	Gln	Lys	Glu 80
	Glu	Gly	Cys	Glu'	Gln 85	Thr	Arg	Thr	Ála	Thr 90	Glu	Ser	Phe	Pro	His 95	Pro
30	-Gly	Phe		Asn 100	Ser	Leu	Pro	Asn	Lys 105	Asp	His	Arg		Asp 110	Ile	Met
	Leu	Val	Lys 115	Mec	Ala	Ser	Pro	Val 120	Ser	Ile	Thr	Trp	Ala 125	Val	Arg	Pro
35	Leu	Thr 130		Ser	Ser	Arg	Cys 135	Val	Thr	Ala	Gly	Thr 140	Ser	Cys	Ser	Phe
40	Pro 145	Ala	Gly	Ala		Arg 150	Pro	Asp	Pro	Ser	Tyr 155	Ala	Cys	Leu	Thr	Pro 160
	Cys	Asp	Ala	Pro	Thr 165	Ser	Pro	Ser	Leu	Ser 170	Thr	Arg	Ser	Val	Arg 175	Ťhr
45	Pro	Thr	Pro	Ala 180	Thr	Ser	Gln	Thr	Pro 195	Trp	Cys	Val	Pro	Ala 190	Cys	Arg
	Ļvs	Gly	Ala 195	Arg	Thr	Pro	Ala	Arg 200	Val	Thr	Pro	Gly	Ala 205	Leu	Trp	Ser
50	Val	Thr 210		Leu	Phe	ŗÀz	Ala 215		Ser	Pro	Gly	Ala 220	Arg	Ile	Arg	Val
55	Arg 225	Ser	Pro	Glu	Ser	Leu 230	Val	Ser	The	Arg	Lys 235	Ser	Ala	Asn	Met	Trp 240
	The	Gly	Ser	Arg	Arg 245											

٠.	(2)	INFO	RMAT	NOI	FOR	SEQ	ID N	io: 7	42:							
5			(i) S (xi)	() () ()	A) Li 3) T 0) T	ENGT: YPE : DPOL(H: 2: ami: DGY:	28 ar no ac line	mino cid ear	acio		: 741	2 :			
10	Glu 1		Arg	Ile	Ile . 5	Lys	Gly	Phe	Glu	Cys 10	Lys	Leu	His	Ser	Gln 15	Pro
	Trp	Gln	Ala	Ala 20	Leu _.	Phe	Glu [']	Lys	Thr 25	Arg	Leu	Leu	Cys	Gly 30	Ala	Thr
15	Leu	Ile	Ala 35	Pro	Arg	Trp	Leu	Leu 40	Thr	Ala	Ala	His	Cys 45	Leu	Ŀys	Pro
20	Arg	Tyr 50	Ile	Val	His	Leu	Gly 55	Gln	His	Asn	Leu	Gln 60	Lys	Glu	Glu	Gly
20	Cys 65	Glu	Gln	Thr	Arg	Thr 70	Ala	Thr	Glu	Ser	Phe 75	Pro	His	Pro	Gly	Phe 80
25	Asn	Asn	Ser		Pro . 85	Asn	Lys	Asp	His	Arg 90	Asn	Asp	Ile	Met	Leu 95	Val
	Lys	Met	Ala	Ser 100	Pro	Val	Ser	Ile	Thr 105	Trp	Ala	Val	yrā	Pro 110	Leu	Thr
30	Leu	Ser	Ser 115	Arg	Cys	Val	Thr	Ala 120	Gly	Thr	Ser	Cys	Ser 125	Phe	Pro	Ala
35	Gly	Ala 130	Ala	Arg	Pro	Asp	Pro 135		īòī	Ala	Cys	Leu 140	Thr	Pro	·Cys	qzA
	Ala 145		Thr · ·	Ser	Pro	Ser 150	Leu	Ser	Thr	Arg	Ser 155	Val	Arg	Thr	Pro	Thr 160
40	Pro	Ala	Thr		Gln 165		Pro	Trp	Cys	Val 170		Ala	Cys	Arg	Lys 175	Gly
	•			180					185					190	•	Thr
45	Ser	Leu	Phe 195	Lys	Ala	Leu	Ser	200		Ala	Arg	Ile	Arg 205	Val	Arg	Ser
50	Pro	210		Leu	Val	Ser	Thr 215		Lys	Ser	· Ala	Asn 220		Trp	Thr	Gly
	Ser 225	-	Arg	Arg												
55	(2)	INF	ORMA	TION	FOR	SEÇ	QI (NO:	743:	•						
•			(<u>i</u>)	SEQU	JENC:	E CHI	\RACT	reris	TICS	5:	•					

(A) LENGTH: 74 amino acids

(B) TYPE: amino acid

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726

			()	: פת (כ	OPOL	OGY :	lin	ear							
	(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 743: Cys Lys Leu His Ser Gln Pro Trp Gln Ala Ala Leu Fhe Glu Lys Thr 10 13														
5		s Leu	His	_	Gln	Pro	Trp	Gln		Ala	Leu	Fine	Glu		The
	Arg Le	u Leu	Cys 20	Gly	Ala	Thr	Leu	Ile 25	Ala	Pro	Arg	IIP	1 <u>eu</u> 30	Leu	The
10	Ala Al	a His 35	Cảz	Leu	Lys	Pro	Arg 40	īĀī	Ile	уаl	His	L e u 45	Gly	31 . .	His
15	Asn Le	u Gln O	Lys	Glu	Gln	Gly 55	Cys	Glu	Gln	Thx	Arg 60	<u>Cyr</u>	Ale	Tiz	3111
	Ser Ph	e Pro	His	Pro	Gly 70	Phe	Asn	Asn	Ser		•				
20															
	(2) IN	FORMA'	rion	FOR	SEQ	ID 1	10: 7	744:							
25			(A) L 3) T D) T	engt YPE: Opol	H: 8 ami CGY:	l am no a lin	ino cid ear	acid		: 74	4 :			
	Val Le	u Gln	Gly	Arg	Tyr	Phe	Ser	Pro	Ile	Leu	Glu	Met	Arg	Arg	Leu
30	1	-		5		•			10				,	15	
	Arg Pr	o Glu	Gly 20	Xaa	Xaa	Asn	Leu	Pro 25	Gly	Gly	Ser	Arg	Ala 30	31 . .	Lys
35	Glu Pr	o Arg 35	Gln	Asp	Leu	Thr	40 40	Val	Leu	Trp	₽∵o	His 45	C.\.z	FTO	His
40	Phe Al	a Mec O	Thr	Arg	Ser	Ty: 55	Val	Pro	Thr	Lys	Gln 60	C7/s	Met	Val	317.
	Gly Se	r Phe	Tyr	Cys	Ile 70	Phe	Ile	Phe	Lys	Gly 75	Pro	Val	Gla	Ast.	80 exi
45	Cys								٠						
												•			
50	(2) IN								•					•	
		(i)		A) L		ឣ: 2	11 a	miņo	: aci	ćs					
. 55		(عنا)	. (SEQ		OPOL E DE				EQ I	סא פ	: 74	5 :			
	Met Pr	o Ile	Ile	Asp 5	Gln	Val	Asn	Pro	Glu 10	Leu	His	Asp	Phe	Met 13	Gln

Ser Ala Glu Val Gly Thr Ile Phe Ala Leu Ser Trp Leu Ile Thr Trp

				٤.					25					٥٤		
5	Phe	Bly	#1s 38	7 a l	Leu	Sef	Asp	Phe 40	Arg	His	Val	Val	Arg 45	Leu	Tyr •	Asp
	Phe	Fite El	lei	ALE	Cys	<u>#1</u> 5	FT5	Leu	Ket	Pro	Ile	57∕ 2 60	Phe	Ala	Ala	Val
10		Val	Leu	77 7	Arg	G14 70		Glu	711	Leu	Asp 75	C/s	qzA	Cys	Asp	Met 80
	غ <u>ن</u> ۽	Ser	Val	His	Ris 85	Leu	Lew	Ser	Gim	31 2 90	Pro	Gla	Asp ,	Leu	Pro 95	Tyr
15	Slu	Titur	Lei	Ile 100	Ser	AZ Ş	<u> 73 8</u> ;	31 11	Thr 195	Phe	lau	Phe	Ser	Phe 110	Pro	His
20	272	Ast.	Let 115	Lei	Gly	æş	320	Leu 120	5 <u>.</u> 23	Asn	Ser	Lys	Leu 125	yrg	GŢÀ	Arg
	3lm	9#6 130	Leu	Leu	Ser	Lys	Thr 135	Leu	.Ser	طتئ	<u>Ki</u> s	Gln 140	Pro	Ser	Arg	Gly
25	Leu 148		ī.	Cys	Cys	Gly 150	2ez	Gly	Хаа	بقتو	Gly 155	Leu	Leu	Arg	Pro	Glu 160
	Asp	æş	Thr	Lys	كچې 165	Val	Leu	Thr	Żγs	Pro 170	æş	72.5	neA	9.T.G	Phe 175	Val
30	Lys	leu	Ala	Val 120	Met	Gly	Leu	Thr	Val 135	Ala	Leu	Gly	Ala	Ala 190	Ala	Leu
35	Ala:	Val	Val 195	Lys	Ser	ai.	Leu	Glu 200	فتن	Ala	220	Lys,	Phe 205	Gln	Leu	Gln
	Ber J	Phe 11:	Pers				-		,	,						
40	(2)	23	OPYGL	TECE ;	FCR	SEŞ	: CI	::O:: `	745:						,	
45				- (A) L B) T D) T	CER. ENGE: OPOL E DE	H: 7 emi OG::	o am no a lim	ino cid ear	acid		: 74	б:			
50	Cys 1	275	Glu	Pha	Phe 5	Ile	320	Ala	T <u>h=</u>	Leu 10	Pro	Cys	Pro	Phe	Val 15	Phe
	Ala	Phe	The	Ser 20	Glu	Ala	Ser	Ser	ATT 25	Ala	T/T	Lau	Thr	Gln 30	Arg	Gly
55	200	Gly	Gly 35		Ala	Gln.	Asn	Leu 40	Met	Pro	Leu	Pro	Val 45	Gly	Phe	Trp
60	Met	31y 53		Leu	Pro	Pro	?⊤o 35	Trp	CÀR	Trp	٤٣٤	90 FÀ2		Val	Ser	Glų

```
Ala Cys Ser Cys Phe Cys
 5
      (2) INFORMATION FOR SEQ ID NO: 747:
            (i) SEQUENCE CHARACTERISTICS:
                 (A) LENGTH: 20 amino acids
10
                  (B) TYPE: amino acid
                  (D) TOPOLOGY: linear
            (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 747:
     Cly The Gly Ser Val Ser Ala Ala Gly Arg Arg Ser Gly Gly Thr Trp
15
                          10 15
 Gln Pro Val Gln
              20
20
     (2) INFORMATION FOR SEQ ID NO: 748:
           (i) SEQUENCE CHARACTERISTICS:
25
                (A) LENGTH: 15 amino acids
                 (B) TYPE: amino acid
                 (D) TOPOLOGY: linear
           (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 748:
     Pro Gly Gly Leu Ala Val Gly Ser Arg Trp Trp Ser Arg Ser Leu Thr
     1 , 5
                           10 ' 15
35
     (2) INFORMATION FOR SEQ ID NO: 749:
40
           (i) SEQUENCE CHARACTERISTICS:
                 (A) LENGTH: 30 amino acids
                 (B) TYPE: amino acid
                 (D) TOPOLOGY: linear
        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 749:
45
     Leu Glu Pro Ser Arg Gln Arg Arg Pro Arg Arg Arg Gly Gly Thr Ser
     Arg Pro Glu Thr Asp Gln Arg Ala Lys Cys Trp Arg Gln Leu
50
                    25
     (2) INFORMATION FOR SEQ ID NO: 750:
55
```

(A) LENGTH: 11 amino acids
(B) TYPE: amino acid
(D) TOPOLOGY: linear
(Xi) SEQUENCE DESCRIPTION: SEQ ID NO: 750:

(i) SEQUENCE CHARACTERISTICS:

	Val Cys Leu Arg Cys Gln Asn Arg Met Glu Asn 1 5 10	
5		
	(2) INFORMATION FOR SEQ ID NO: 751:	
10	(i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 367 amino acids (B) TYPE: amino acid (D) TOPOLOGY: linear (xi) SEQUENCE DESCRIPTION: SEQ ID NO:	751:
15	Met Ala Ala Cys Thr Ala Arg Arg Pro Gly Arg G 1 5 10	Sly Gln Pro Leu Val 15
20	Val Pro Val Ala Asp Xaa Gly Pro Val Ala Lys A 20 25	ula Ala Leu Cys Ala 30
	Ala Kaa Ala Gly Ala Phe Ser Pro Ala Ser Thr T 35 , 40	Thr Thr Arg Arg 45
25	His Leu Ser Ser Arg Asn Arg Pro Glu Gly Lys V 50 55	al Leu Glu Thr Val 60
	Gly Val Phe Glu Val Pro Lys Gln Asn Gly Lys T 65 70 75	yr Glu Thr Gly Gln 80
30	Leu Phe Leu His Ser Ile Phe Gly Tyr Azg Gly V 85 90	Val Leu Phe Pro 95
35	Trp Gln Ala Arg Leu Xaa Asp Arg Asp Val Ala S 100 105	Ser Ala Ala Pro Glu 110
	Lys Ala Glu Asn Pro Ala Gly His Gly Ser Lys G 115 - 120	lu Val Lys Gly Lys 125
40	Thr His Thr Tyr Tyr Gln Val Leu Ile Asp Ala A 130 135 1	rg Asp Cys Pro His
	Ile Ser Gln Arg Ser Gln Thr Glu Ala Val Thr P 145 150 155	he Leu Ala Asn His 160
45	Asp Asp Ser Arg Ala Leu Tyr Ala Ile Pro Gly L 165 170	eu Asp Tyr Val Ser 175
50	His Glu Asp Ile Leu Pro Tyr Thr Ser Thr Asp G 180	Eln Val Pro Ile Gln 190
	His Glu Leu Phe Glu Arg Phe Leu Tyr Asp G 195	ln Thr Lys Ala Pro 205
55	Pro Phe Val Ala Arg Glu Thr Leu Arg Ala Trp G 210 215 2	iln Glu Lys Asn His 200 .
	Pro Trp Leu Glu Leu Ser Asp Val His Arg Glu T 235 230 235	
60	Arg Val Thr Val Ile Pro Phe Tyr Met Gly Met A	rg Glu Ala Gln Asn

					245					250					255	
5	Ser	His	Val	Tyr 260		Trp	Arg	Tyr	Cys 265	Ile	Arg	Leu	Glu	Asn 270	Leu	Asp
	Ser	Asp	Val 275	Val	Gln	Leu	Arg	Glu 230	Arg	His	Trp	Arg	Ile 285	Phe	Ser	Leu
10	Ser	290 Gly	Thr	Leu	Gľu	Thr	Val 295	Arg	Gly	Arg	Gly	Val 300	Val	Gly	. Arg	Glu
	Pro 305	Val	Leu	Ser	Lys	Glu 310	Gln	Pro	Ala	Phe	Gln 315	Tyr	Ser	Ser	His	Val 320
15	Ser	Leu	Gln	Ala	Ser 325	Ser	Gly	His	Met	Trp 330	Gly	Thr	Phe	Arg	Phe 335	Glu
20	Arg	Pro	Asp	Gly 340	Ser	His	Phe	Asp	Val 345	Arg	Ile	Pro	Pro	Phe 350	Ser	Leu
	Glu	Ser	Asn 355	Lys	Asp	Glu	Lys	Thr 360	Pro	Pro	Ser	Gly	Leu 365	His	Trp	
25	(2)	INFO	PMA	rion	FOR	SEQ	ID N	io: 7	752:							
30				() () ()	A) L: B) T D) T	ENGT: YPE: OPOL	H: 3: ami: OGY:	ERIST am: no ac line PTION	ino a cid ear	acid		.752		,		
35	Met 1	Ala	Ala	Cys	Thr 5	Ala	Arg	Arg	Pro	Gly 10	Arg	Gly	Gln	Pro	Leu 15	Val
	Val	Pro	Val	Ala 20	Asp	Xaa	Glý	Pro	Val 25	Ala	Lys	Ala	Ala	Leu 30	Cys	Ala
10	Ala															
15	(2)	INFO	RMAI	NOI	FOR	SEQ	ID N	10: 7	53 :							
50 .				() () ()	4) LI 3) T 0) T	engti (PE : Opolo	i: 31 amir XGY:	RIST ami no ac line TION	ino a cid ear	acids		753	i:- 1			
55	Met 1	Ala	Ala	Cys	Thr 5	Ala	Arg	Arg	Pro	Gly 10	Arg	Gly	Gln	Pro	Leu 15	Val
	Val	Pro	Val	Ala 20	Asp	Kaa	Gly	Pro	Val 25	Ala	Lys .	Ala	Ala	Leu 30	Cys .	Ala

Ala

60

- 1 1 1 1 1 1

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(2) INFORMATION FOR SEQ ID NO: 754:
           (i) SEQUENCE CHARACTERISTICS:
                 (A) LENGTH: 33 amino acids
                  (B) TYPE: amino acid
                  (D) TOPOLOGY: linear
          (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 754:
     Met Ala Ala Cys Thr Ala Arg Arg Pro Gly Arg Gly Gln Pro Leu Val
15
     Val Pro Val Ala Asp Xaa Gly Pro Val Ala Lys Ala Ala Leu Cys Ala
                       25 .. . 30
                20
     Ala
20
     (2) INFORMATION FOR SEQ ID NO: 755:
25
           (i) SEQUENCE CHARACTERISTICS:
                  (A) LENGTH: 33 amino acids
                  (B) TYPE: amino acid
                  (D) TOPOLOGY: linear
           (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 755:
30
     Met Ala Ala Cys Thr Ala Arg Arg Pro Gly Arg Gly Gln Pro Leu Val
                          10
     Val Pro Val Ala Asp Xaa Gly Pro Val Ala Lys Ala Ala Leu Cys Ala
35
      20
                            25
     Ala
40
     (2) INFORMATION FOR SEQ ID NO: 755:
            (i) SEQUENCE CHARACTERISTICS:
45
                  (A) LENGTH: 33 amino acids
                  (B) TYPE: amino acid
                  (D) TOPOLOGY: linear
            (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 756:
50
     Met Ala Ala Cys Thr Ala Arg Arg Pro Gly Arg Gly Gln Pro Leu Val
      1 5 10
     Val Pro Val Ala Asp Xaa Gly Pro Val Ala Lys Ala Ala Leu Cys Ala
                20
                               25
55
     Ala
```

```
(2) INFORMATION FOR SEQ ID NO: 757:
           (i) SEQUENCE CHARACTERISTICS:
                (A) LENGTH: 35 amino acids
5
                  (E) TYPE: amino acid
                 (D) TOPOLOGY: linear
            (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 757:
     Val Leu Glu Thr Val Gly Val Phe Glu Val Pro Lys Gln Asn Gly Lys
10
     Tyr Glu Thr Gly Gln Leu Phe Leu His Ser Ile Phe Gly Tyr Arg Gly
       20 25 30
15
     Val Val Leu
20
   (2) INFORMATION FOR SEQ ID NO: 758:
           (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 16 amino acids
                 (B) TYPE: amino acid
             (D) TOPOLOGY: linear
25
          (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 758:
     Gly Leu Asp Tyr Val Ser His Glu Asp Ile Leu Pro Tyr Thr Ser Thr
           5
                           . 10
30
35
     (2) INFORMATION FOR SEQ ID NO: 759:
           (i) SEQUENCE CHARACTERISTICS:
                  (A) LENGTH: 19 amino acids
40
                  (B) TYPE: amino acid
                 (D) TOPOLOGY: linear
            (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 759:
     Asp Val His Arg Glu Thr Thr Glu Asn Ile Arg Val Thr Val Ile Pro
45
     Phe Tyr Met
50
     (2) INFORMATION FOR SEQ ID NO: 760:
            (i) SEQUENCE CHARACTERISTICS:
55
                 (A) LENGTH: 21 amino acids .
                 (B) TYPE: amino acid
                 (D) TOPOLOGY: linear
            (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 760:
60 Trp Trp Arg Tyr Cys Ile Arg Leu Glu Asn Leu Asp Ser Asp Val Val
```

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10
                                                      15
      Gln Leu Arg Glu Arg
              20
 5
       (2) INFORMATION FOR SEQ ID NO: 761:
          (i) SEQUENCE CHARACTERISTICS:
. 10
               (A) LENGTH: 26 amino acids
                  (B) TYPE: amino acid
                  (D) TOPOLOGY: linear
            (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 761:
 15
      Pro Ala Phe Gln Tyr Ser Ser His Val Ser Leu Gln Ala Ser Ser Gly
       1 5
                           10 . 15
      His Met Trp Gly Thr Phe Arg Phe Glu Arg
 20
               -20
      (2) INFORMATION FOR SEQ ID NO: 762:
 25
            (i) SEQUENCE CHARACTERISTICS:
                (A) LENGTH: 11 amino acids
                  (B) TYPE: amino acid
                  (D) TOPOLOGY: linear
 30 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 762:
      Ser Leu Cys Cys Pro Glu Gly Ala Glu Gly Cys
      1 5
 35
     (2) INFORMATION FOR SEQ ID NO: 763:
            (i) SEQUENCE CHARACTERISTICS:
 40
                  (A) LENGTH: 12 amino acids
                  (B) TYPE: amino acid
                  (D) TOPOLOGY: linear
             (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 763:
      Gln Leu Lys Lys Thr His Tyr Asp Arg Pro Cys Pro
       1 5 10
 50
     (2) INFORMATION FOR SEQ ID NO: 754:
             (i) SEQUENCE CHARACTERISTICS:
                 (A) LENGTH: 12 amino acids
                  (B) TYPE: amino acid
 55
                 (D) TOPOLOGY: linear
             (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 764:
      Gln Leu Lys Lys Thr His Tyr Asp Arg Pro Cys Pro
                          70
       1 5
 60
```

	(2)	INF	ORMA	TION	FOR	SEQ	ID !	NO: 1	765:							-
5			(<u>i</u>)	(A) L 3) T	ENGT YPE :	H:`l ami	ERIS 70 a no a lin	mino cid		ds					
10	٠		(xi)	SEQ.						EQ II	D NO	: 76	5: ·			
	Ala 1	Gln	Arg	Lys	Lys 5	Glu	Mec	Val	Leu	Ser 10	Glu	ŗĀR	Val	Ser	Gln 15	Leu
15	μiec	Glu	לבה	Tnr 20	Asn	Lys	Arg	Pro	Va1 25	Ile	Arg	Met	Asn	Gly 30	Asp	Lys
	· Phe	Arg	Arg 35	Leu	Val	Lys	Ala	Pro 40	Pro	Arg	Asn	Tyr	Ser 45.		Ile	Val
20	Met	Phe 50	Thr	Ala	Leu	Gln	Leu 55	His	Arg	Gln	Cys	Val 60	Val	Cys	Lys	Gln
25	Ala 65	Asp	Glu	Glu	Phe	Gln 70	īle	Leu	Ala	Asn	Ser 75	Trp	Arg	Tyr	Ser	Ser 80
	Ala	Phe	Thr	Asn	A <u>r</u> g 85	Ile	Phe	Phe	Äla	Met 90	Val	qzA	Phe	Asp	Glu 95	Gly
30	Ser	Asp	Val	Phe 100	Gln	Met	Leu	Asn	Met 105	Asn	Ser	Ala	Pro	Thr 110	Phe	Ile
	Asn	Phe	Pro 115	Ala	Lys	Gly	Lys	Pro 120	Lys	Arg	Gly	Asp	Thr 125	Tyr	Glu	Leu
35	Gln	Val 130	Arg	Gly	Phe	Ser	Ala 135	Glu	GÌn	Ile	Ala	Arg 140	Trp	Ile	Ala	Asp
40	Arg 145	Thr	qzA	Val	Asn	Ile 150	Arg	Val	Ile	Arg	Pro 155	Pro	Asn	Met	Ala	Ala 160
. 0	Arg	Trp	Arg	Phe	Trp 165	Cys	Val	Ser	Val	Thr 170						
45	(2)	TAIR	ORMA	TTON	202	550	, TD 1	NIC	766.					•		
	1-7	2241		SEQU				NO: ' Eris		:						•
50				(A) L E) T D) T	ENGT YPE : OPOL	H: l ami OGY:	.5 am no a lin	ino cid ear	acid		: 76	6 :			
55		Val	Val	Ala		Leu								Ala	Ser 15	

(2) INFORMATION FOR SEQ ID NO: 767:

```
(i) SEQUENCE CHARACTERISTICS:
                 (A) LENGTH: 16 amino acids
                 (B) TYPE: amino acid
                 (D) TOPOLOGY: linear
 5
          (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 767:
     Ala Gln Arg Lys Lys Glu Met Val Leu Ser Glu Lys Val Ser Gln Leu
                             10
10
15
   (2) INFORMATION FOR SEQ ID NO: 768:
           (i) SEQUENCE CHARACTERISTICS:
                 (A) LENGTH: 17 amino acids
                 (B) TYPE: amino acid .
20
            (D) TOPOLOGY: linear
           (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 768:
     Met Glu Trp Thr Asn Lys Arg Pro Val Ile Arg Met Asn Gly Asp Lys
                   5
                         10
                                          15
25
30
    (2) INFORMATION FOR SEQ ID NO: 769:
           (i) SEQUENCE CHARACTERISTICS:
                 (A) LENGTH: 55 amino acids
                 (B) TYPE: amino acid
35
                 (D) TOPOLOGY: linear
           (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 769:
     Arg Arg Leu Val Lys Ala Pro Pro Arg Asn Tyr Ser Val Ile Val Met
40
      1 5 . 10
     Phe Thr Ala Leu Gln Leu His Arg Gln Cys Val Val Cys Lys Gln Ala
                20 25 30
45
     Asp Glu Glu Phe Gln Ile Leu Ala Asn Ser Trp Arg Tyr Ser Ser Ala
     Phe Thr Asn Arg Ile Phe Phe Ala
        50
                         55
50
     (2) INFORMATION FOR SEQ ID NO: 770:
55
           (i) SEQUENCE CHARACTERISTICS:
                 (A) LENGTH: 31 amino acids
                 (B) TYPE: amino acid
                 (D) TOPOLOGY: linear
           (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 770:
60
```

Met Val Asp Phe Asp Glu Gly Ser Asp Val Phe Gln Met Leu Asn Met

```
Asn Ser Ala Pro Thr Phe Ile Asn Phe Pro Ala Lys Gly Lys Pro
 5
                                25 30
     (2) INFORMATION FOR SEQ ID NO: 771:
10
           (i) SEQUENCE CHARACTERISTICS:
                 (A) LENGTH: 37 amino acids
                 (B) TYPE: amino acid
                 (D) TOPOLOGY - linear
15
          (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 771:
     Lys Arg Gly Asp Thr Tyr Glu Leu Gln Val Arg Gly Phe Ser Ala Glu
                               10
20
     Gln Ile Ala Arg Trp Ile Ala Asp Arg Thr Asp Val Asn Ile Arg Val
          20 25
     Ile Arg Pro Pro Asn
           35
25
     (2) INFORMATION FOR SEQ ID NO: 772:
30
           (i) SEQUENCE CHARACTERISTICS:
                 (A) LENGTH: 44 amino acids
                 (B) TYPE: amino acid
                 (D) TOPOLOGY: linear
           (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 772:
35
     Tyr Ala Gly Pro Leu Met Leu Gly Leu Leu Leu Ala Val Ile Gly Gly
      1 . 5
     Leu Val Tyr Leu Arg Arg Val Ile Trp Asn Phe Ser Leu Ile Lys Leu
40
         20 25 30
     Asp Gly Leu Leu Gln Leu Cys Val Leu Cys Leu Leu
        . 35
                              40
45
     (2) INFORMATION FOR SEQ ID NO: 773:
           (i) SEQUENCE CHARACTERISTICS:
50
                 (A) LENGTH: 17 amino acids
                 (B) TYPE: amino acid
                 (D) TOPOLOGY: linear .
           (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 773:
     Asp Ala Val Phe Lys Gly Phe Ser Asp Cys Leu Leu Lys Leu Gly Asp
            5
                           10
     Ser
```

	(2) INFORMATION FOR SEQ ID NO: 774:
5	. (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 20 amino acids (B) TYPE: amino acid
10	(D) TOFOLOGY: linear (Xi) SEQUENCE DESCRIPTION: SEQ ID NO: 774: Cys Gln Glu Gly Ala Lys Asp Met Trp Asp Lys Leu Arg Lys Glu Ser
	1 5 10 15
15	Lys Asn Leu Asn 20
20	(2) INFORMATION FOR SEQ ID NO: 775:
25	(i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 16 amino acids (B) TYPE: amino acid (D) TOPOLOGY: linear
25	(xi) SEQUENCE DESCRIPTION: SEQ.ID NO: 775: Val Leu Leu Val Ser Leu Ser Ala Ala Leu Ala Thr Trp Leu Ser Phe
	1 5 10 15
30	,
35	(2) INFORMATION FOR SEQ'ID NO: 776:
	(i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 48 amino acids (E) TYPE: amino acid
40	(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 776:
45	Met Gly Leu Lys Leu Asn Gly Arg Tyr Ile Ser Leu Ile Leu Ala Val 1 5 ' 10 *15
,,,	Gin Ile Ala Tyr Leu Val Gin Ala Val Arg Ala Ala Gly Lys Cys Asp 20 25 30
50	Ala Val Phe Lys Gly Phe Ser Asp Cys Leu Leu Lys Leu Gly Asp Ser 35 40 45
55	
	(2) INFORMATION FOR SEQ ID NO: 777:

·(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 90 amino acids

(B) TYPE: amino acid

(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 777:

- 5 Pro Ala Ala Trp Asp Asp Lys Thr Asn Ile Lys Thr Val Cys Thr Tyr
 1 5 10 15
- Trp Glu Asp Phe His Ser Cys Thr Val Thr Ala Leu Thr Asp Cys Gln \$20\$ \$25\$ \$30

Glu Gly Ala Lys Asp Met Trp Asp Lys Leu Arg Lys Glu Ser Lys Asn 35 40 45

Leu Asn The Glo Gly Ser Leu Phe Glu Leu Cys Gly Ser Cly Acn Gly 15 50 55 60

Ala Ala Giy Ser Leu Leu Pro Ala Phe Pro Val Leu Leu Val Ser Leu 65 70 75 80

- 20 Ser Ala Ala Leu Ala Thr Trp Leu Ser Phe 85 90
- 25 (2) INFORMATION FOR SEQ ID NO: 778:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 143 amino acids
 - (B) TYPE: amino acid'
- 30 (D) TOPOLOGY: linear
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 778: ,

Met Gly Leu Lys Leu Asn Gly Arg Tyr Ile Ser Leu Ile Leu Ala Val 1 5 10 15

Gln Ile Ala Tyr Leu Val Gln Ala Val Arg Ala Ala Gly Lys Cys Asp . 20 . 25 . 30

Ala Val Phe Lys Gly Phe Ser Asp Cys Leu Leu Lys Leu Gly Asp Ser 40

Xaa Xaa Xaa Xaa Pro Ala Ala Trp Asp Asp Lys Thr Asn Ile Lys

Thr Val Cys Thr Tyr Trp Glu Asp Phe His Ser Cys Thr Val Thr Ala 65 70 75 80

Leu Thr Asp Cys Gln Glu Gly Ala Lys Asp Met Trp Asp Lys Leu Arg 85 90 95

Lys Glu Ser Lys Asn Leu Asn Ile Gln Gly Ser Leu Phe Glu Leu Cys 100 105 110

Gly Ser Gly Asn Gly Ala Ala Gly Ser Leu Leu Pro Ala Phe Pro Val 55 115 120 125

Leu Leu Val Ser Leu Ser Ala Ala Leu Ala Thr Trp Leu Ser Phe 130 125 140

50.

	(2) INFORMATION FOR SEQ ID NO: 779:
5	 (i) SEQUENCE CHAPACTERISTICS: (A) LENGTH; 34 amino acids (B) TYPE: amino acid (D) TOPOLOGY: linear (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 779:
10	Met Asn Ser Ala Ala Gly Phe Ser His Leu Asp Arg Arg Glu Arg Val 1 5 10 15
15	Leu Lys Leu Gly Glu Ser Phe Glu Lys Gln Pro Arg Cys Ala Ser Thr 20 25 . 30 Leu Cys
20	
20	(2) INFORMATION FOR SEQ ID NO: 780:
25	 (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 28 amino acids (B) TYPE: amino acid (D) TOPOLOGY: linear (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 780:
30	Thr Ile Tyr Pro Thr Glu Glu Glu Leu Gln Ala Val Gln Lys Ile Val 1 5 10 15
	Ser Ile Thr Glu Arg Ala Leu Lys Leu Val Ser Asp 20 25
35	(2) 1) 200 200 200 20 20 20 20 20 20 20 20 20
40	(2) INFORMATION FOR SEQ ID NO: 781: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 30 amino acids (B) TYPE: amino acid (D) TOPOLOGY: linear (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 781:
45	Arg Ala Leu Lys Gly Val Leu Arg Val Gly Val Leu Ala Lys Gly Leu 1 5 10 15
50	Leu Leu Arg Gly Asp Arg Asn Val Asn Leu Val Leu Cys 20 25 30
	(2) INFORMATION FOR SEQ ID NO: 782:
55	(i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 39 amino acids (B) TYPE: amino acid (D) TOPOLOGY: linear
60	(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 782:

```
Ala Leu Ala Ala Leu Arg His Ala Lys Trp Phe Gln Ala Arg Ala Asn
                                       10 -
     Gly Leu Gln Ser Cys Val Ile Ile Ile Arg Ile Leu Arg Asp Leu Cys
                20
                                   25
     Gln Arg Val Pro Thr Trp Ser
             35
10
    (2) INFORMATION FOR SEQ ID NO: 783:
            (i) SEQUENCE CHARACTERISTICS:
15
                  (A) LENGTH: 17 amino acids
                  (B) TYPE: amino acid
                  (D) TOPOLOGY: linear
           (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 783:
     Gly Asp Ala Leu Arg Arg Val Phe Glu Cys Ile Ser Ser Gly Ile Ile
                5
                                       1.0
                                                        15
     Leu
25
     (2) INFORMATION FOR SEQ ID NO: 784:
30
            (i) SEQUENCE CHARACTERISTICS:
                 (A) LENGTH: 16 amino acids
                (B) TYPE: amino acid
(D) TOPOLOGY: linear
           (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 784:
35
     Leu Ala Phe Arg Gln Ile His Lys Val Leu Gly Met Asp Pro Leu Pro
     1 5 10
40
     (2) INFORMATION FOR SEQ ID NO: 785:
45
            (i) SEQUENCE CHARACTERISTICS:
                 (A) LENGTH: 342 amino acids
                (B) TYPE: amino acid
                 (D) TOPOLOGY: linear
50
            (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 785:
     Thr Ile Tyr Pro Thr Glu Glu Glu Leu Gln Ala Val Gln Lys Ile Val
                    5
                             55
     Ser Ile Thr Glu Arg Ala Leu Lys Leu Val Ser Asp Ser Leu Ser Glu
                                   25
     His Glu Lys Asn Lys Asn Lys Glu Gly Asp Asp Lys Lys Glu Gly Gly
60
```

	Lys	Asp 50	Arg	Ala	Leu	Lys	Gly 55	Val	Leu	Arg	Val	Gly 60	Val	Leu	Ala	Lys
5	Gly 65	Leu	Leu	Leu	Arg	Gly 70	Asp	Arg	Asn	Val	Asn 75	Leu	Val	Leu	Leu	80 Cys
	Ser	Glu	Lys	Pro	Ser 85	Lys	Thr	ren	Leu	Ser 90	Arg	Ile `	Ala	Glu	Asn -95	Leu
10	Pro	Lys	Gln	Leu 100	Ala	Val	Ile	Ser	Pro 105	Glu	ŗàz	Tyr	Asp	Ile 110	Lys	Cys
15	Ala	Val	Ser 115	Glu	Ala	Ala	Ile	Ile 120	Leu	Asn	Ser	Cys	Val 125	Glu	Pro	Lys
	Mec	Gln 130	Val.	Thr	Ile	Thr	Leu 135	Thr	Ser	Pro	Ile	Ile 140	Arg	Glu	Glu	Asn
20	Met 145	Arg	Glu	Gly	qzA	Val 150	Thr	Ser	Gly	Met	Val 155	Lys	Asp	Pro		Asp 160
	Val	Leu	qzA		Gln .165	Lys	Cys	Leu	Asp	Ala 170	Leu	Ala	Ala	Leu	Arg 175	His
25	Ala	Lys	Trp	Phe 180	Gln	Ala	Arg	Ala	Asn 185	Gly	Leu	Gln	Ser	Cys 190	Val	Ile
30	Ile	Ile	Arg 195	Ile	Leu	Arg	Asp	Leu 200	Cys	Gln	Arg.	.Val	Pro 205	Thr	Trp	Ser
	Asp	Phe 210	510	Ser	Trp	Ala	Met 215	Glu	Leu	Leu	Val	Glu 220	Lys	Ala ,	Ile	Ser
35	Ser 225	Ala	Ser	Ser	Pro	Gln 230	Ser	Pro	Gly	Asp	Ala 235	Leu	Arg	Arg	Val	Phe 240
	Glu	Cys	Ile	Ser	Ser 245	Gly	Ile	Ile	Leu	Lys 250	Gly	Ser	Pro	Gly	Leu 255	Leu
40	Asp	Pro	Cys	Glu 260	Lys	Asp	Pro	Phe	Asp 265	Thr	Leu	Ala	Thr	Met 270	Thr	Asp
45	Gln	Gln	Arg 275		Asp.	Ile	Thr	Ser 280		Ala	Gln	Phe	Ala 285	Leu	Arg	Leu
	Leu	Ala 290	Phe	Arg	Gln	Ile	His 295	Lys	Val	Leu	Gly	Met 300	Asp	PTO	Leu	Pro
50	Gln 305	Met.	Ser	Gln	Arg	Phe 310	Asn	Ile	His	Asn	Asn 315	Arg	Lys	Arg	Arg	Arg 320
	Asp	Ser	qzA	Gly	Val 325	qzĄ	Gly	Phe	Glu	Ala 330	Ģlu	Gly	Lys	Ļys	Asp 335	
55	Lys	Asp	ī'nī	Asp 340	Asn	Phe										•

```
(i) SEQUENCE CHARACTERISTICS: .
                  (A) LENGTH: 24 amino acids
                  (E) TYPE: amino acid
 5
                  (D) TOPOLOGY: linear
            (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 786:
     Met Gly Ser Gln His Ser Ala Ala Ala Arg Pro Ser Ser Cys Arg Arg
                           10
                                                       15
10
      Lys Gln Glu Asp Asp Arg Asp Gly
                 20
15
      (2) INFORMATION FOR SEQ ID NO: 787:
            (i) SEQUENCE CHARACTERISTICS:
                  (A) LENGTH: 30 amino acids
20
                   (B) TYPE: amino acid
                  (D) TOPOLOGY: linear
            (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 787:
      Leu Leu Ala Glu Arg Glu Gln Glu Glu Ala Ile Ala Gln Phe Pro Tvr
25.
      1 .
             5
                                  , 10
     Val Glu Phe Thr Gly Arg Asp Ser Ile Thr Cys Leu Thr Cys
                 20
                          25
                                                     3.0
30
     (2) INFORMATION FOR SEQ ID NO: 738:
           (i) SEQUENCE CHAPACTERISTICS:
35
                  (A) LENGTH: 34 amino acids
                  (B) TYPE: amino acid
                  (D) TOPOLOGY: linear
            (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 788:
40
     Gln Gly Thr Gly Tyr Ile Pro Thr Glu Gln Val Asn Glu Leu Val Ala
             5 ·
                                     10
      Leu Ile Pro His Ser Asp Gln Arg Leu Arg Pro Gln Arg Thr Lys Gln
                                  45
      Tyr Val
50
      (2) INFORMATION FOR SEQ ID NO: 789:
            (i) SEQUENCE CHARACTERISTICS:
                (A) LENGTH: 55 amino acids
55
                  (B) TYPE: amino acid
                  (D) TOPOLOGY: linear
            (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 789:
     Ala Arg Leu Asn Val Gly Arg Glu Ser Leu Lys Arg Glu Met Leu Lys
           . 5
                            10
```

Ser Gln Gly Val Lys Val Ser Glu Ser Pro Met Gly Ala Arg His Ser Ser Trp Pro Glu Gly Ala Ala Phe Cys Lys Lys Val Gln Gly Ala Gln 40 Met Gln Phe Pro Pro Arg Arg 50 10 (2) INFORMATION FOR SEQ ID NO: 790: 15 (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 15 amino acids (E) TYPE: amino acid (D) TOPOLOGY: linear (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 790: 20 Ala Arg Leu Asn Val Gly Arg Glu Ser Leu Lys Arg Glu Met Leu 10 ,5 25 (2) INFORMATION FOR SEQ ID NO: 791: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 20 amino acids 30. (B) TYPE: amino acid (D) TOPOLOGY: linear (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 791: Leu Lys Ser Gln Gly Val Lys Val Ser Glu Ser Pro Met Gly Ala Arg 35 1 5 10 . His Ser Ser Trp 20 40 (2) INFORMATION FOR SEQ ID NO: 792: (i) SEQUENCE CHARACTERISTICS: 45 (A) LENGTH: 17 amino acids (B) TYPE: amino acid (D) TOPOLOGY: linear (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 792: 50 Ala Phe Cys Lys Lys Val Gln Gly Ala Gln Met Gln Phe Pro Pro Arg 1 5 10 Arg 55

(2) INFORMATION FOR SEQ ID NO: 793:

60 (i) SEQUENCE CHARACTERISTICS:

```
(A) LENGTH: 17 amino acids
                   (B) TYPE: amino acid
                   (D) TOPOLOGY: linear
             (xi) SEQUENCE DESCRIPTION: SEQ ID NC: 793:
 5
      Ala Phe Cys Lys Lys Val Gln Gly Ala Gln Met Gln Phe Pro Pro Arg .
     Arg
10
      (2) INFORMATION FOR SEO ID NO: 794:
15
            (i) SEQUENCE CHARACTERISTICS:
                   (A) LENGTH: 37 amino acids
                   (B) TYPE: amino acid
                  (D) TOPOLCGY: linear
20
            (xi) SEQUENCE DESCRIPTION: SEQ ID No: 794:
     Val Gln Val Leu Glu Gln Leu Thr Asn Asn Ala Val Ala Glu Ser Ard
       1 5 10
     Phe Asn Asp Ala Ala Tyr Tyr Tyr Trp Met Leu Ser Met Gln Cys Leu
                                    25
     Asp Ile Ala Gln Asp
       . 35
30
     (2) INFORMATION FOR SEQ ID NO: 795:
35
           (i) SEQUENCE CHARACTERISTICS:
                   (A) LENGTH: 34 amino acids
                   (B) TYPE: amino acid
                   (D) TOPOLOGY: linear
            (xi) SEQUENCE DESCRIPTION: SEQ ID NC: 795:
40
     Pro Ala Gln Lys Asp Thr Met Leu Gly Lys Phe Tyr His Phe Gln Arg
                                       10
     Leu Ala Glu Leu Tyr His Gly Tyr His Ala Ile His Arg His Thr Glu
45
  Asp Pro
50
     (2) INFORMATION FOR SEQ ID NO: 796:
             (i) SEQUENCE CHARACTERISTICS:
55
                   (A) LENGTH: 27 amino acids
                   (E) TYPE: amino acid
                   (D) TOPOLOGY: linear
             (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 796:
```

Leu Ala Lys Gln Ser Lys Ala Leu Gly Ala Tyr Arg Leu Ala Arg His

5 4 5 4 4 5 4 4 5 6

745

1 10 15 Ala Tyr Asp Lys Leu Arg Gly Leu Tyr Ile Pro 25 20 5 (2) INFORMATION FOR SEQ ID NO: 797: . 10 (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 36 amino acids (B) TYPE: amino acid - ... (D) TOPOLCGY: linear (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 797: 15 Ala Arg Phe Gln Lys Ser Ile Glu Leu Gly Thr Leu Thr Ile Arg Ala 5 . 10 Lys Pro Phe His Asp Ser Glu Glu Leu Val Pro Leu Cys Tyr Arg Cys 20 20 Ser Thr Asn Asn . 35 25 (2) INFORMATION FOR SEQ ID NO: 798: (i) SEQUENCE CHARACTERISTICS: 30 (A) LENGTH: 73 amino acids (B) TYPE: amino acid (D) TOPOLOGY: linear (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 798: 35 Pro Leu Leu Asn Asn Leu Gly Asn Val Cys Ile Asn Cys Arg Gln Pro 10 Phe Ila Phe Ser Ala Ser Ser Tyr Asp Val Leu His Leu Val Glu Phe 20 25 . 30 40 Tyr Leu Glu Glu Gly Ile Thr Asp Glu Glu Ala Ile Ser Leu Ile Asp . 40 Leu Glu Val Leu Arg Pro Lys Arg Asp Asp Arg Gln Leu Glu Ile Cys 45 55 Lys Gin Gln Leu Pro Asp Ser Cys Gly . 70 65 50 (2) INFORMATION FOR SEQ ID NO: 799: (i) SEQUENCE CHARACTERISTICS: 53 (A) LENGTH: 29 amino acids (B) TYPE: amino acid (D) TOPOLOGY: linear (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 799: 60 Met Pro Tyr Ala Gln Trp Leu Ala Glu Asn Asp Arg Phe Glu Glu Ala

•	1.	5	10	15
5	Gln Lys	s Ala Phe His L 20	ys Ala Gly Arg Gln Arg Glu 25	Ala
	(2) INE	FORMATION FOR S	: EQ ID NO: 800:	
10		(A) LEN (B) TYP (D) TOP	HARACTERISTICS: GTH: 36 amino acids E: amino acid OLOGY: linear	
15		(xi) SEOUENCE	DESCRIPTION: SEQ TO NO- 800):
	Phe Ser	r Val His Arg P 5	ro Glu Thr Leu Phe Asn Ile 10	Ser Arg Phe Leu 15
20	Leu His	s Ser Leu Pro L	ys Asp Thr Pro Ser Gly Ile 25	Ser Lys Val Lys
	Ile Leu	Phe Thr		
25				



A. The indications made below relate to the microorganism referre on page 161 , line N/A	d to in the description
B. IDENTIFICATION OF DEPOSIT	Further deposits are identified on an additional sheet
Name of depositary institution American Type Culture College	ection
Address of depositary institution (including postal code and country	ν)
10801 University Boulevard Manassas, Virginia 20110-2209 United States of America	
ý.	
Date of deposit March 27, 1997	Accession Number 97979
C. ADDITIONAL INDICATIONS (leave blank if not applicable	This information is continued on an additional sheet
D. DESIGNATED STATES FOR WHICH INDICATION	NS ARE MADE (if the indications are not for all designated States)
E. SEPARATE FURNISHING OF INDICATIONS (leave	
I he indications listed below will be submitted to the International I Number of Deposit")	Bureau later (specify the general nature of the indications, e.g., "Accession
For receiving Office use only	For International Bureau use only
This sheet was received with the intermational application	This sheet was received by the International Bureau on:
Authorized officer O / UIN 1000	Authorized office:
0 4 JUN 1998	30



A. The indications made below relate to the microorganism refered on page 162 . line N/A	
B. IDENTIFICATION OF DEPOSIT	Further deposits are identified on an additional sheet
Name of depositary institution American Type Culture Col	lection
Address of depositary institution (including postal code and country	(יי)
10801 University Boulevard Manassas, Virginia 20110-2209 United States of America	
Date of deposit April 4, 1997	Accession Number 97974
C. ADDITIONAL INDICATIONS (leave blank if not applicab	(le) This information is continued on an additional sheet
·	
D. DESIGNATED STATES FOR WHICH INDICATION	NS ARF MADE (if the indications are not for all during and Suna)
	at acsignated states)
*	
E. SEPARATE FURNISHING OF INDICATIONS (leave	black if an applicable)
The indications listed below will be submitted to the International I	Bureau later (specify the general nature of the indications, e.g., "Accession
Number of Deposit")	J. J. C. S.
For receiving Office use only	For International Bureau use only
This sheet was received with the international application	This sheet was received by the International Bureau on:
Authorized officer	Authorized officer
<u>- 1</u>	



A. The indications made below relate to the microorganism referred to in the description on page 162 . line N/A
B. IDENTIFICATION OF DEPOSIT Further deposits are identified on an additional sheet
Name of depositary institution American Type Culture Collection
Address of depositary institution (including postal code and country)
10801 University Boulevard Manassas. Virginia 20110-2209 United States of America
Date of deposit May 29, 1997 Accession Number 209080
C. ADDITIONAL INDICATIONS (leave blank if not applicable) This information is continued on an additional sheet
D. DESIGNATED STATES FOR WHICH INDICATIONS ARE MADE (if the indications are not for all designated States)
E. SEPARATE FURNISHING OF INDICATIONS (leave blank if not applicable)
The indications listed below will be submitted to the International Bureau later (specify the general nature of the indications, e.g., "Accession Number of Deposit")
For receiving Office use only For International Bureau use only
This sheet was received with the international application Fritzern Councilist 1.37.42.07.00.00.00.00.00.00.00.00.00.00.00.00.
Authorized officer Authorized officer

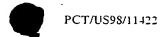


A. The indications made below relate to the microorganism re on page 164 . line 1	ferred to in the description N/A
B. IDENTIFICATION OF DEPOSIT	Further deposits are identified on an additional sheet
Name of depositary institution American Type Culture	Collection
Address of depositary institution (including postal code and co	ountry)
10801 University Boulevard Manassas, Virginia 20110-2209 United States of America	
Date of deposit December 3, 1997	Accession Number 209511
C. ADDITIONAL INDICATIONS (leave blank if not appl	icable) This information is continued on an additional sheet
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E. SEPARATE FURNISHING OF INDICATIONS (I	eave blank if not applicable)
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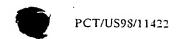
A. The indications made below relate to the microorganism referred on page 167 . line N/A	to in the description
B. IDENTIFICATION OF DEPOSIT	Further deposits are identified on an additional sheet
Name of depositary institution American Type Culture Colle	
Address of depositary institution (including postal code and country 10801 University Boulevard Manassas, Virginia 20110-2209 United States of America	
Date of deposit April 4, 1997	Accession Number 97975
C. ADDITIONAL INDICATIONS (leave blank if not applicable	This information is continued on an additional sheet
D. DESIGNATED STATES FOR WHICH INDICATION	NS ARE MADE (if the indications are not for all designated States)
E. SEPARATE FURNISHING OF INDICATIONS (leave The indications listed below will be submitted to the International Number of Deposit")	biank if not applicable) Bureau later (specify the general nature of the malcations, e.g., "Accession
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A. The indications made below relate to the microorganism referred to in the description on page 167	
B. IDENTIFICATION OF DEPOSIT	Further deposits are identified on an additional sheet .—
Name of depositary institution American Type Culture Coll	ection
Address of depositary institution (including postal code and country	(u
10801 University Boulevard Manassas. Virginia 20110-2209 United States of America	
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Date of deposit May 29, 1997	Accession Number 209081
C. ADDITIONAL INDICATIONS (leave blank; if not applicab.	This information is continued on an additional sheet
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A. The indications made below relate to the microorganism referred on page 171 . line N/A	
. IDENTIFICATION OF DEPOSIT	Further deposits are identified on an additional sheet
Name of depositary institution American Type Culture Col	lection
Address of depositary institution (including postal code and count.	(ימ
10801 University Boulevard Manassas, Virginia 20110-2209 United States of America	
Pate of deposit April 4, 1997	Accession Number 97976
C. ADDITIONAL INDICATIONS (leave blank if not applicab	This information is continued on an additional sheet
D. DESIGNATED STATES FOR WHICH INDICATIO	NS ARE MADE (if the indications are not for all designated States)
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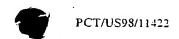
A. The indications made below relate to the microorganism referred on page 172 line N/A	
B. IDENTIFICATION OF DEPOSIT	Further deposits are identified on an additional sheet
Name of depositary institution American Type Culture Col	lection
Address of depositary institution (including postal code and count	·v)
10801 University Boulevard Manassas, Virginia 20110-2209 United States of America	
Date of deposit April 4, 1997	Accession Number 97977
C. ADDITIONAL INDICATIONS (leave blank if not applicable	ble) This information is continued on an additional sheet
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A. The indications made below relate to the microorganism refer on page172, lineN/2	
B. IDENTIFICATION OF DEPOSIT	Further deposits are identified on an additional sheet
Name of depositary institution American Type Culture Co	ollection
Address of depositary institution (including postal code and coun	יערץ)
10801 University Boulevard Manassas, Virginia 20110-2209 United States of America	
Date of deposit May 29, 1997	Accession Number 209082
C. ADDITIONAL INDICATIONS (leave blank if not applica	This information is continued on an additional sheet
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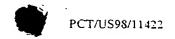
A. The indications made below relate to the microorganism referred on page 176 , line N/A	d to in the description
B. IDENTIFICATION OF DEPOSIT	Further deposits are identified on an additional sheet
Name of depositary institution American Type Culture Colle	ection
Address of depositary institution (including postal code and country 10801 University Boulevard Manassas, Virginia 20110-2209 United States of America	·)
Date of deposit April 28, 1997	Accession Number 209007
C. ADDITIONAL INDICATIONS (leave blank if not applicable	This information is continued on an additional sheet
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A. The indications made below relate to the microorganism reference on page 176 , line N/A	d to in the description
B. IDENTIFICATION OF DEPOSIT	Further deposits are identified on an additional sheet
Name of depositary institution American Type Culture Colle	ection
Address of depositary institution (including postal code and country 10801 University Boulevard Manassas, Virginia 20110-2209 United States of America	ν) *
Date of deposit May 29, 1997	Accession Number 209083
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A. The indications made below relate to the microorganism referming on page 179 . line N/A	
B. IDENTIFICATION OF DEPOSIT	Further deposits are identified on an additional sheet :
Name of depositary institution American Type Culture Col	lection
Address of depositary institution (including postal code and count 10801 University Boulevard Manassas, Virginia 20110-2209 United States of America	(עָר)
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Date of deposit April 28, 1997	Accession Number 209008
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A. The indications made below relate to the microorganism referred on page 179 , line N/A	to in the description
B. IDENTIFICATION OF DEPOSIT	Further deposits are identified on an additional sheet
Name of depositary institution American Type Culture College	ction
Address of depositary institution (including postal code and country	
10801 University Boulevard Manassas, Virginia 20110-2209 United States of America	
Date of deposit May 29, 1997	Accession Number 209084
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A. The indications made below relate to the microorganism referred on page 180 . , line N/A	to in the description
B. IDENTIFICATION OF DEPOSIT	Further deposits are identified on an additional sheet
Name of depositary institution American Type Culture Colle	ection
Address of depositary institution (including postal code and country	ψ)
10801 University Boulevard Manassas, Virginia 20110-2209 -United States of America	
Date of deposit April 28, 1997	Accession Number 209010
C. ADDITIONAL INDICATIONS (leave blank if not applicable	This information is continued on an additional sheet
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A. The indications made below relate to the microorganism referred on page 180 . line N/A	•
B. IDENTIFICATION OF DEPOSIT	Further deposits are identified on an additional sheet
Name of depositary institution American Type Culture Coll	lection
Address of depositary institution (including postal code and country 10801 University Boulevard Manassas, Virginia 20110-2209 United States of America	(עָת
Date of deposit May 29, 1997	Accession Number 209085
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A. The indications made below relate to the microorganism refer on page 182 , line $N/$	·
B. IDENTIFICATION OF DEPOSIT	Further deposits are identified on an additional sheet
Name of depositary institution American Type Culture Co	ollection .
Address of depositary institution (including postal code and cour	ntry)
10801 University Boulevard Manassas, Virginia 20110-2209 United States of America	
Date of deposit April 28, 1997	Accession Number 209009
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A. The indications made below relate to the microorganism referred to in the description on page 186			
B. IDENTIFICATION OF DEPO	SIT	Further deposits are identified on an additional sheet	
Name of depositary institution Am	erican Type Culture Coll	ection	
Address of depositary institution (inclu	ding postal code and countr	(v	
10801 University Boulevard Manassas, Virginia 20110-2209 United States of America	·	-36	
Date of deposit April 28, 1997		Accession Number 209011	
C. ADDITIONAL INDICATION	S (leave blank if not applicab	This information is continued on an additional sheet	
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A. The indications made below relate to the microorganism referred to in the description on page 174 , line N/A		
B. IDENTIFICATION OF DEPOSIT	r	Further deposits are identified on an additional sheet
Name of depositary institution American	can Type Culture Colle	ection
Address of depositary institution (including	g postal code and country	v)
10801 University Boulevard Manassas, Virginia 20110-2209 United States of America	-	
Date of deposit April 7, 1998		Accession Number 209746
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- 1. An isolated nucleic acid molecule comprising a polynucleotide having a nucleotide sequence at least 95% identical to a sequence selected from the group consisting of:
- (a) a polynucleotide fragment of SEQ ID NO:X or a polynucleotide fragment of the cDNA sequence included in ATCC Deposit No:Z, which is hybridizable to SEQ ID NO:X:
- (b) a polynucleotide encoding a polypeptide fragment of SEQ ID NO:Y or a polypeptide fragment encoded by the cDNA sequence included in ATCC Deposit No:Z, which is hybridizable to SEQ ID NO:X;
- (c) a polynucleotide encoding a polypeptide domain of SEQ ID NO:Y or a polypeptide domain encoded by the cDNA sequence included in ATCC Deposit No:Z, which is hybridizable to SEQ ID NO:X;
- (d) a polynucleotide encoding a polypeptide epitope of SEQ ID NO:Y or a polypeptide epitope encoded by the cDNA sequence included in ATCC Deposit No:Z, which is hybridizable to SEQ ID NO:X;
- (e) a polynucleotide encoding a polypeptide of SEQ ID NO:Y or the cDNA sequence included in ATCC Deposit No:Z, which is hybridizable to SEQ ID NO:X, having biological activity;
 - (f) a polynucleotide which is a variant of SEQ ID NO:X;
 - (g) a polynucleotide which is an allelic variant of SEQ ID NO:X;
 - (h) a polynucleotide which encodes a species homologue of the SEQ ID NO:Y;
- (i) a polynucleotide capable of hybridizing under stringent conditions to any one of the polynucleotides specified in (a)-(h), wherein said polynucleotide does not hybridize under stringent conditions to a nucleic acid molecule having a nucleotide sequence of only A residues or of only T residues.
- 2. The isolated nucleic acid molecule of claim 1, wherein the polynucleotide fragment comprises a nucleotide sequence encoding a secreted protein.
- 3. The isolated nucleic acid molecule of claim 1, wherein the polynucleotide fragment comprises a nucleotide sequence encoding the sequence identified as SEQ ID NO:Y or the polypeptide encoded by the cDNA sequence included in ATCC Deposit No:Z, which is hybridizable to SEQ ID NO:X.



- 4. The isolated nucleic acid molecule of claim 1, wherein the polynucleotide fragment comprises the entire nucleotide sequence of SEQ ID NO:X or the cDNA sequence included in ATCC Deposit No:Z, which is hybridizable to SEQ ID NO:X.

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- 5. The isolated nucleic acid molecule of claim 2, wherein the nucleotide sequence comprises sequential nucleotide deletions from either the C-terminus or the N-terminus.
- 6. The isolated nucleic acid molecule of claim 3, wherein the nucleotide sequence comprises sequential nucleotide deletions from either the C-terminus or the N-terminus.
- 7. A recombinant vector comprising the isolated nucleic acid molecule of claim 1.
- 8. A method of making a recombinant host cell comprising the isolated nucleic acid molecule of claim 1.
 - 9. A recombinant host cell produced by the method of claim 8.
 - 10. The recombinant host cell of claim 9 comprising vector sequences.
- 11. An isolated polypeptide comprising an amino acid sequence at least 95% identical to a sequence selected from the group consisting of:
- (a) a polypeptide fragment of SEQ ID NO:Y or the encoded sequence included in ATCC Deposit No:Z;
- (b) a polypeptide fragment of SEQ ID NO:Y or the encoded sequence included in ATCC Deposit No:Z, having biological activity;
- (c) a polypeptide domain of SEQ ID NO:Y or the encoded sequence included in ATCC Deposit No:Z;
- (d) a polypeptide epitope of SEQ ID NO:Y or the encoded sequence included in ATCC Deposit No:Z;
- (e) a secreted form of SEQ ID NO:Y or the encoded sequence included in ATCC Deposit No:Z;
- (f) a full length protein of SEQ ID NO:Y or the encoded sequence included in ATCC Deposit No:Z;

- (g) a variant of SEQ ID NO:Y;
- (h) an allelic variant of SEQ ID NO:Y; or
- (i) a species homologue of the SEQ ID NO:Y.
- 12. The isolated polypeptide of claim 11, wherein the secreted form or the full length protein comprises sequential amino acid deletions from either the C-terminus or the N-terminus.
- 13. An isolated antibody that binds specifically to the isolated polypeptide of claim 11.
- 14. A recombinant host cell that expresses the isolated polypeptide of claim
 - 15. A method of making an isolated polypeptide comprising:
- (a) culturing the recombinant host cell of claim 14 under conditions such that said polypeptide is expressed; and
 - (b) recovering said polypeptide.
 - 16. The polypeptide produced by claim 15.
- 17. A method for preventing, treating, or ameliorating a medical condition, comprising administering to a mammalian subject a therapeutically effective amount of the polypeptide of claim 11 or the polynucleotide of claim 1.
- 18. A method of diagnosing a pathological condition or a susceptibility to a pathological condition in a subject comprising:
- (a) determining the presence or absence of a mutation in the polynucleotide of claim 1: and
- (b) diagnosing a pathological condition or a susceptibility to a pathological condition based on the presence or absence of said mutation.
- 19. A method of diagnosing a pathological condition or a susceptibility to a pathological condition in a subject comprising:
- (a) determining the presence or amount of expression of the polypeptide of claim 11 in a biological sample; and
- (b) diagnosing a pathological condition or a susceptibility to a pathological condition based on the presence or amount of expression of the polypeptide.



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- 20. A method for identifying a binding partner to the polypeptide of claim 11 comprising:
 - (a) contacting the polypeptide of claim 11 with a binding partner, and
- (b) determining whether the binding partner effects an activity of the polypeptide.
 - The gene corresponding to the cDNA sequence of SEQ ID.NO:Y.
- 22. A method of identifying an activity in a biological assay, wherein the method comprises:
 - (a) expressing SEQ ID NO:X in a cell;
 - (b) isolating the supernatant;
 - (c) detecting an activity in a biological assay; and
 - (d) identifying the protein in the supernatant having the activity.
 - 23. The product produced by the method of claim 22.



PCT

DECLARATION OF NON-ESTABLISHMENT OF INTERNATIONAL SEARCH REPORT (PCT Article 17(2)(a) and Rule 39)

Applicant's or agent's file reference PZ007PCT	IMPORTANT DECLARATION	Date of mailing (day/month/year)			
International application No:	International filing date (day/month/year)	(Earliest) Priority Date (day/month/year)			
PCT/US98/11422	04 JUNE 1998	06 JUNE 1997			
International Patent Classification (IPC) or both national classification and IPC Please See Continuation Sheet.					
Applicant HUMAN GENOME SCIENCES, INC					
This International Searching Authority hereby declares, according to Article 17(2)(a), that no international search report will be established on the international application for the reasons indicated below.					
	ernational application relates to:	·			
scientific theories.	•				
b. mathematical theori	cs				
c. plant varieties.	•	,			
d. animal varieties. e. essentially biological processes for the production of plants and animals, other than microbiological processes					
e. essentially biologica and the products of	• • •	mais, outer man interoblological processes			
f. schemes, rules or m	ethods of doing business.	• •			
g. schemes, rules or m	nethods of performing purely mental acts.				
h. schemes, rules or methods of playing games.					
i. methods for treatment of the human body by surgery or therapy.					
j. methods for treatme	ent of the animal body by surgery or therapy.				
k. diagnostic methods practiced on the human or animal body.					
l. mere presentations of information.					
m. computer programs for which this International Seatching Authority is not equipped to search prior art.					
2. The failure of the following parts of the international application to comply with prescribed requirements prevents a meaningful search from being carried out					
. the description	the claims	the drawings			
3. The failure of the nucleotide and/or amino acid sequence listing to comply with the prescribed requirements prevents a meaningful search from being carried our					
it does not comply	with the prescribed standard				
X it is not in the pres	cribed machine readable form				
4. Further comments: Please See Continuation Sheet					
Name and mailing address of the ISA/US Authorized offices					
Commissioner of Palents and Trademarks Commissioner of Palents and Trademarks					
Box PCT Washington, D.C. 20231 BRIAN R. STANTON					
Facsimile No. (703) 305-3230 Telephone No. (703) 308-0196					



DECLARATION OF NON-ESTABLISHMENT OF INTERNATIONAL SEARCH REPORT

International application No. PCT/US98/11422

The International Patent Classification (IPC) or National Classification and IPC are as listed below:

IPC(6): A01N 37/18, 43/04; C12Q 1/00, 1/02, 1/68; C12N 5/00, 5/06, 15/00, 15/06, 15/09, 15/10, 15/11; G01N 33/53

US CL.: 435, 4, 7.1, 69.1, 70.1, 71.1, 172.3, 243, 320.1, 325, 410; 514/2, 44; 530/350, 387.1

4. Further Comments (Continued):

Applicant has not responded to the invitation to pay additional fees mailed on 04 August 1998. Therefore, the search would be conducted on the first appearing invention white includes claims 1-10, 14, and 15 in so far as these claims are drawn to the first ten (10) appearing nucleotide sequences. However, no meaningful search could be carried out on these sequences because the CRF that was received for this case on 15 June 1998 was technically defective and could not be used to conduct a search of the prior art.